

7N-02
199049
808.

TECHNICAL NOTE

D-421

INVESTIGATION AT TRANSONIC SPEEDS
OF LOADING OVER A 30° SWEPTBACK WING OF ASPECT
RATIO 3, TAPER RATIO 0.2, AND NACA 65A004 AIRFOIL
SECTION MOUNTED ON A BODY

By Donald D. Arabian

Langley Research Center
Langley Field, Va.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
WASHINGTON

June 1960

(NASA-TN-D-421) INVESTIGATION AT TRANSONIC
SPEEDS OF LOADING OVER A 30° SWEPTBACK
WING OF ASPECT RATIO 3, TAPER RATIO 0.2, AND
NACA 65A004 AIRFOIL SECTION MOUNTED ON A
BODY (NASA) 808

N89-70453

Unclas
00/02 0199049

LD
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

TECHNICAL NOTE D-421

INVESTIGATION AT TRANSONIC SPEEDS
OF LOADING OVER A 30° SWEEPBACK WING OF ASPECT
RATIO 3, TAPER RATIO 0.2, AND NACA 65A004 AIRFOIL
SECTION MOUNTED ON A BODY¹

L
1
0
6
1
By Donald D. Arabian

SUMMARY

The aerodynamic load characteristics of a wing-body combination were determined experimentally at Mach numbers from 0.80 to 1.03 for angles of attack up to 26 degrees. Two wings, both with 30° sweep of the quarter-chord line, taper ratio of 0.2, aspect ratio of 3, and thickness of 4 percent chord, but of different types of construction, were tested. One wing was of solid steel and the other was of plastic with an inner steel core.

The load distributions for both wings were similar, but loads on the more flexible wing were somewhat reduced. The twist distributions for both wings were calculated. Some typical flow studies of the boundary layer are presented.

INTRODUCTION

Satisfactory stability characteristics have been obtained at subsonic speeds for thin low-aspect-ratio wings with moderate leading-edge sweep (ref. 1). In order to evaluate in detail the load and stability characteristics of this type of wing on a body of revolution throughout the transonic speed range, a wing with an aspect ratio of 3, a taper ratio of 0.2, 30° sweepback of the quarter-chord line, and with NACA 65A004 airfoil sections was selected and the load characteristics are presented. The longitudinal stability characteristics are presented in reference 2. This wing is one of several wings being studied in a general program at the Langley 16-foot transonic tunnel. To date, the load characteristics of other wings in the program have been published in references 3, 4, 5, and 6. Data were obtained at Mach numbers from 0.80

¹Supersedes declassified NACA RM L57G09a by Donald D. Arabian, 1957.

to 1.03 for angles of attack up to about 26° for two wings of the same geometry but constructed of different materials. One wing was made of steel and plastic in an attempt to devise a cheaper and faster method of wing construction. The other was a solid steel wing used for comparison to check the effect of aeroelasticity and to establish the validity of data obtained with the less-rigid reinforced plastic wing. The twist distribution due to aerodynamic loading was calculated for both wings. Some typical flow studies of the boundary layer are also presented.

SYMBOLS

b	wing span
c	wing chord parallel to the plane of symmetry
\bar{c}	average wing chord
c'	mean aerodynamic chord
c_n	wing section normal-force coefficient
c_m	section pitching-moment coefficient about the wing mean aerodynamic chord
C_N	wing-panel normal-force coefficient, $\int_{0.16}^{1.0} c_n \frac{c}{\bar{c}} d\left(\frac{2y}{b}\right)$
C_m	wing-panel pitching-moment coefficient about $0.25c'$, $\int_{0.16}^{1.0} c_m \frac{c^2}{\bar{c}c'} d\left(\frac{2y}{b}\right)$
C_p	pressure coefficient, $\frac{\Delta p}{q}$
M	Mach number
Δp	local static pressure minus the free-stream static pressure
q	dynamic pressure
x	distance parallel to the center line
y	distance normal to the plane of symmetry

- α model angle of attack
- θ angle of twist of the chord line measured in planes parallel to the plane of symmetry

MODEL DESCRIPTION

The general arrangement of the model is shown in figure 1(a). The wing was mounted to the same steel body of revolution used in references 4 and 5. The fuselage had a fineness ratio of 11, an ogive nose, cylindrical center section and a boattail afterbody. The wing was swept 30° at the quarter-chord line with a taper ratio of 0.2, and aspect ratio of 3, and NACA 65A004 sections parallel to the plane of symmetry. Two wings were constructed of different materials. Figure 1(b) shows typical cross sections of both wings. One was constructed entirely of steel with a leading-edge section and a trailing-edge section which was tongue and grooved to a center section. The spaces left in the grooves were used as ducts for the pressure tubes to the orifices. The other wing was constructed in such manner that a steel core with a thin brass plate at the trailing edge was surrounded with the wing pressure tubes, and then polyester resin was poured about the structure to form the wing contour. This wing hereinafter is called the plastic wing.

The twist characteristics for these wings were determined by the method described in appendix A. The steel wing was found to be less than half as flexible as the plastic wing. The influence coefficients A_{ij} and B_{ij} (see appendix A) used to calculate the twist were as follows:

For the steel wing:

i	$A_{ij} \times 10^{-5}$ at $j = -$				
	1	2	3	4	5
1	0	0	0	-1	-4
2	-2	6	-2	-8	-13
3	-2	5	9	-9	-28
4	1	4	7	11	-27
5	1	4	5	12	-5

i	$B_{ij} \times 10^{-5}$ at $j = -$				
	1	2	3	4	5
1	0	0.1	0.1	0.2	-0.3
2	-.1	1.3	1.1	.9	.3
3	-.1	1.7	3.9	3.2	.3
4	.3	1.7	4.9	11.5	10.5
5	.3	1.8	4.8	14.1	37.9

For the plastic wing:

i	$A_{ij} \times 10^{-5}$ at $j = -$				
	1	2	3	4	5
1	0	-2	-3	-6	-11
2	-1	7	-7	-22	-34
3	1	9	8	-31	-78
4	2	9	14	-2	-100
5	2	9	14	6	-69

i	$B_{ij} \times 10^{-5}$ at $j = -$				
	1	2	3	4	5
1	0	0.3	1.0	0.8	1.1
2	-0.1	1.9	1.8	0	3.1
3	.1	3.3	7.0	7.3	7.6
4	.2	3.5	10.4	23.1	33.4
5	.2	3.5	11.1	30.2	90.8

where A_{ij} and B_{ij} represent the twist in degrees measured parallel to the angle-of-attack plane at the i th station due to a load or moment at the j th station, respectively. The five spanwise stations chosen were located as follows:

Station	$\frac{y}{b/2}$
1	0.245
2	.412
3	.580
4	.750
5	.915

A better comparison of the twist characteristics, however, of the steel and plastic wing is shown in figures 2(a) and (b). The plots show the effect of a unit loading applied at any spanwise station (abscissa), on the particular spanwise stations 1 through 5, for loadings at the 25- and 65-percent-chord lines. The main difference between the two plots results from a change in the stiffness and a shift of the elastic-axis location of the two wings. If the elastic axis is defined as that point of the local chord which gives zero twist when a load is applied at the point, then figure 2 indicates the position of the elastic axis. The plots show that the elastic axis of the plastic wing passes through the 0.25c at about the 0.75b/2 station, while that of the steel wing passes through the 0.25c at the 0.85b/2 station. Inboard of these spanwise stations the elastic axis lies behind the 0.25c line (positive values of twist), and outboard the axis lies ahead of the 0.25c line (negative values of twist).

The rows of pressure orifices were located at 16, 25, 40, 60, 75, and 95 percent semispan stations for both the steel and plastic wings. In each row on both the upper and lower surfaces, the orifices were

located at 1, 2, 5, 7, 10 percent c and at intervals of every 5 percent chord thereafter up to the 95-percent-chord station.

TESTS AND TECHNIQUES

The tests were conducted in the Langley 16-foot transonic tunnel, which is described in reference 7. The Mach number range extended from 0.80 to 1.03, which corresponded to a Reynolds number range from about 7×10^6 to 8×10^6 (based on the wing mean aerodynamic chord). The maximum angle-of-attack range extended from -2° to 26° in 2° increments.

The pressure data were obtained simultaneously with the force data presented in reference 2. The wing pressures were recorded by photographing mercury manometer boards. The data were then processed by electronic calculating machines, which plotted and tabulated the results.

At the termination of the pressure program, a study was made of the flow in the boundary layer of the plastic wing for a reduced Mach number and angle-of-attack range. The technique used in reference 5 was employed to render the flow visible. The technique entails painting the wing surface black and then applying a white ground-glass paint similar to china clay. The wing therefore appears white when dry. Wetting with a clear fluid causes the black sublayer to become visible. Thus, by emitting fluid from a point source on the wing in a stream, the fluid path in the boundary layer is traced. As the fluid trace changes with time, the history of the trace disappears as a result of the evaporation of the fluid, so that the existing trace represents an average flow for a short interval of time. For these tests clear varsol was used as the liquid agent. The point sources were particular pressure orifices through which the fluid was forced. The locations of the sources were as follows:

$\frac{x}{c}$ at -				
$0.25 \frac{b}{2}$	$0.40 \frac{b}{2}$	$0.60 \frac{b}{2}$	$0.75 \frac{b}{2}$	$0.95 \frac{b}{2}$
0.5	0.5	0.5	0.5	0.5
.10	----	----	----	----
.15	.15	----	----	----
.20	.20	----	----	----
.25	.25	.25	.25	----
----	.35	----	----	----
.45	.45	.45	.45	.45
.65	.65	.65	.65	----
.80	.80	.80	.80	.80
.90	.90	.90	.90	----

The flow studies were recorded photographically.

ACCURACY OF MEASUREMENTS

Sufficient time was allowed after a particular test condition was reached for the pressure manometer tubes to settle within about 1 percent of the ultimate value of the manometer level.

The indicated angle of attack was corrected for tunnel-flow angularity. Based on readout accuracy and repeatability, the angle of attack and Mach number are believed to be accurate within the following limits:

α , deg	± 0.01
M	± 0.005

RESULTS AND DISCUSSION

Flow studies.— Sample photographs of the flow on the right plastic wing are presented in figure 3. No general discussion of swept-wing flow is attempted here. Only those features of the flow studies which represent significant characteristics to be noted in the following wing pressure discussion are covered. A general discussion of the flow over swept wings may be found in references 8, 9, and 10.

Some of the features of the boundary flow which can be noted in the photographs of figure 3 are the indications of shock waves, the indications of flow separation, and the indications of vortex-type flow.

Shock waves are frequently indicated by the fluid path where there are abrupt changes of the streamlines. Note in figure 3(a) at $M = 0.94$ that shadowgraph traces of the waves are visible at angles of attack of 2° and 4° (indicated by the arrows on the figure), and note how the fluid lines are altered where they intersect the wave. The location of the waves is more obvious at the higher angles of attack by the more abrupt turning of the flow.

Separation first appears as an irregular darkened region generally increasing in area with increasing angle of attack. For this wing there appear to be two different areas where separation may commence, depending on the Mach number. At $M = 0.80$ for example, figure 3(a) at $\alpha = 4^\circ$ shows the separation to start along the leading edge near the wing tip. This results from a combination of a swept leading edge, a small leading-edge radius, and a thin wing. At the higher Mach numbers leading-edge separation as such occurs only at much higher angles of attack. (Compare 0.80 with 0.94 and 1.03 Mach numbers of fig. 3(a) for $\alpha = 6^\circ$.) However, separation does start near the tip at the trailing edge before the leading-edge separation occurs. See figure 3(a) at $\alpha = 6^\circ$ for

$M = 0.94$ and figure 3(b) at $\alpha = 10^\circ$ for $M = 1.03$. This separation appears to stem from the intersection, in the vicinity of the wing tip, of the shocks originating at the leading edge and near the trailing edge of the wing-body juncture. Both types of separation extend inboard with increasing angle of attack.

Once separation occurs, the existence of vorticity in the flow above the wing is indicated in the boundary-layer traces by the circulation of the fluid lines in a counterclockwise direction. For example, observe the photographs for $M = 0.80$ at the higher angles of attack. A line through the aftermost points along each of the indicated streamlines should coincide with the projection of the vortex core on the wing surface. Note that at $\alpha = 6^\circ$, the vortex cone sheds near the tip and the point of shedding progresses inboard with increasing angle of attack, as does the separation. At $\alpha = 19^\circ$ (fig. 3(c)) the vortex appears to shed at about $0.25b/2$. The vortex strength at this angle of attack is much greater than at the lower angles of attack, as is shown by the accumulation of the fluid near the vortex origin.

The origin of the vorticity at $M = 0.94$ and $M = 1.03$ appears to be in the vicinity of the intersection of the shock waves where the separation forms. Vorticity is permitted at the shock intersection since different entropy changes occur inboard and outboard of the intersection. The angle of attack at which this vortex forms increases with Mach number. With increasing angle of attack at the higher Mach numbers, the vortex flow finally reverts to a vortex generated along the leading edge once the leading-edge separation occurs at the higher angles of attack.

Chordwise pressure distributions.— A tabulation of the chordwise pressure coefficients for all test conditions for the steel wing is presented in table I. Figure 4 presents a comparison between the chordwise pressure distributions for the plastic and steel wings. As is noted, there are minor differences in the angles of attack for the two wings. In general these differences are of the order of the accuracy of measurements of these angles ($\pm 0.10^\circ$). The differences in the pressure coefficient with one exception may therefore be considered to be caused principally by aeroelastic effects. A significant difference in the variation of the chordwise pressure distributions exists between the two wings at angles of attack from about 2° to 8° at a Mach number of 0.80. As this Mach number was the first for which data were obtained, the discrepancy suggests a temporary difference in the leading-edge surface conditions for the two wings. The plastic-wing flow studies of figure 3(a), which were taken after the pressure tests, for angles of attack of 4° and 6° at a Mach number of 0.80 indicated separation at the outer spanwise stations, but the pressure distributions of the plastic wings indicated attached flow. The outboard stations of the plastic wing generally show the effect of decreased local angles of attack due to load when compared to the steel wing.

For either wing at the low angles of attack the increase in load coefficient progressing toward the tip illustrates the effective spanwise increase of angle of attack induced by the trailing vortices of a highly tapered swept wing. Consequently, the separation appears first at the tip and progresses inboard with increasing angle of attack as indicated by the flow studies of figure 3.

The pressure distributions on the upper surface are fairly constant over most of the wing panel at an angle of attack of about 20° , which of course indicates separation. Increasing the angle above 20° produces more negative pressure coefficients and, in addition, the innermost station shows signs of the streamlines being turned downward toward the wing surface; that is, the pressures near the trailing edge begin to recover or increase in a positive sense. As the angle of attack is further increased this effect tends to progress outboard. These pressure changes are believed to be caused by the change in location and the increasing strength of the vortex that is shown in figure 3 at $M = 0.80$. At $M = 0.94$ to 1.03 for the high angles of attack, the distributions near the root are also influenced by the strong shock wave shown by the chordwise distributions.

Spanwise load distributions.- It is apparent from the chordwise pressures that the type of wing construction, with some exceptions, has only minor effects on load distribution; therefore, the spanwise load distributions are presented only for the steel wing in figure 5. The distributions are nearly elliptical at the low angles of attack, but as the angle of attack increases, the load distributions tend to become triangular, with the triangular loading commencing at the tip. The triangular distribution spreads inboard as separation forms with further increase of angle of attack. At the angles of attack where the load distribution is elliptical inboard and triangular outboard, increasing Mach number tended to reduce the extent of the triangular loading. The implication is that increasing Mach number at a high constant angle of attack extends the attached flow region outboard. This implication is verified by the flow studies (fig. 3(c)). Note that at angles of attack of 15° and 17° , the higher the Mach number, the larger the region of attached flow.

Panel loads.- The variation of the integrated wing loads with angle of attack is shown in figure 6 for the test Mach number range. If compressibility effects are considered, the load-carrying capacity per unit angle of attack should increase to a maximum at approximately $M = 1.00$.

The data show that, for C_N values up to about 0.6, the maximum load-carrying capacity per unit angle of attack occurred at $M \approx 0.94$. For C_N values from 0.6 to the highest test value, the maximum load-carrying capacity occurred at $M \approx 0.98$.

A comparison of the variation of the panel pitching-moment coefficient about the 0.25c' with normal-force coefficient and the wing-body pitching-moment data of reference 2 is shown in figure 7. The changes of the slopes $\frac{dC_m}{dC_N}$ with normal-force coefficient agree in general with those of the data of reference 2. The absolute differences in $\frac{dC_m}{dC_N}$ at a given normal-force coefficient are due to the absence of the fuselage stability contribution in the present data.

Center of loads.- Figure 8 presents the exposed panel load centers and the local section load centers for the angle-of-attack and Mach number range of the tests. The spanwise center of load was located at approximately 50 percent of the semispan for all test conditions. The most rearward position was at about 46 percent of the mean aerodynamic chord for the panel load centers and 46 percent of the local chord for the section load centers.

Increasing angle of attack up to about 20° tended to shift the panel center of load rearward and inboard. The single data point for α above 20° shows a tendency for the center of load to become invariant with the higher angles of attack. In general the effects of changes in angle of attack on the center of load decrease with increasing Mach number; this result is to be expected since the chordwise load distribution becomes more rectangular as the flow becomes supersonic over most of the wing.

Twist distribution.- Combining the influence coefficients and the integrated normal forces and moments in the manner described in appendix A or by the method of reference 5 yields the wing spanwise twist distributions. The dynamic pressures corresponding to the measured loads are presented in figure 9 for the test Mach number range. Calculations were made for both wings at angles of attack of 4° , 8° , and 20° and for $M = 0.80$ and 1.00 . A comparison of the resulting spanwise twist distributions for the steel and plastic wings is presented in figures 10(a) and 10(b). At $\alpha = 20^\circ$ and $M = 1.0$ the calculated twist angle of the tip of the plastic wing was -0.9° as compared to -0.4° for the steel wing.

CONCLUDING REMARKS

The following remarks are drawn from the loads investigation of an all steel wing and a geometrically identical reinforced plastic wing. Both wings have 30° sweepback of the quarter chord, a taper ratio of 0.2, and embody NACA 65A004 airfoil sections.

The chordwise pressure distributions for the steel and plastic wings were similar for the test range with some exceptions at Mach number 0.80.

However the type of construction had only minor effects on the chordwise and spanwise load distributions. The order of magnitude of the tip twist was calculated at a Mach number of 1.0 and an angle of attack of 20° to be -0.9° for the plastic wing as compared to -0.4° for the steel wing. The spanwise load distributions were nearly elliptical at the low angles of attack, but at the higher angles the distributions tended to become triangular commencing at the tip. The center of load on the wing panels moved rearward and inboard with increasing angle of attack for all Mach numbers. The movement of the load center with angle of attack decreased considerably with increasing Mach number.

Langley Aeronautical Laboratory,
National Advisory Committee for Aeronautics,
Langley Field, Va., June 19, 1957.

APPENDIX A

METHOD OF COMPUTING WING TWIST DUE TO AERODYNAMIC LOADING

If the spanwise and chordwise distribution of aerodynamic loading of an elastic wing are known, the twist distribution of the wing can be calculated, as follows

$$\{\theta\} = [A] \{l\} + [B] \{m\}$$

where the influence coefficients are defined as the elements of the square matrices $[A]$ and $[B]$.

The elements A_{ij} and B_{ij} represent the twist at the i th spanwise station due to a load or moment at the j th station.

The spanwise load distribution and the spanwise pitching-moment distribution are elements of the column matrices $\{l\}$ and $\{m\}$, respectively, where the elements l_j and m_j are the integrated loads and moments respectively over the j th spanwise segment; that is,

$$l_j = q\bar{c} \frac{b}{2} \int_{(j-1)/n}^{j/n} c_n \frac{c}{\bar{c}} d\left(\frac{2y}{b}\right)$$

and

$$m_j = qc'\bar{c} \frac{b}{2} \int_{(j-1)/n}^{j/n} c_m \frac{c^2}{c'\bar{c}} d\left(\frac{2y}{b}\right)$$

where

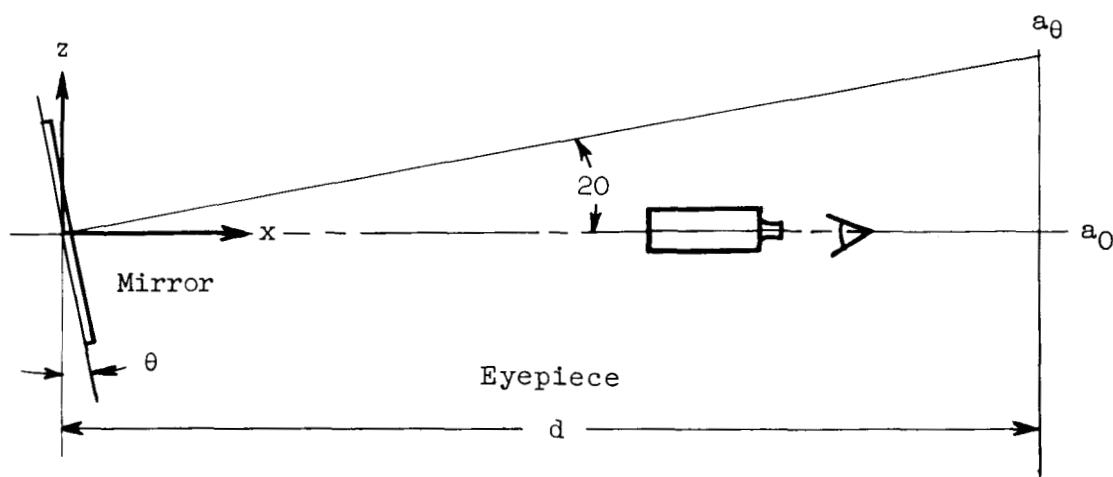
n number of spanwise stations

c' mean aerodynamic chord

\bar{c} average chord

c local chord

The setup for measuring twist with mirrors is shown in figure 11. The technique employed for obtaining the influence coefficients involved principally the use of mirrors, linear scales, and a transit. Loads were applied at the desired points along the wing. A diagram illustrating the twist measurements is shown below:



where

a_0 zero twist reading

a_θ reading due to twist θ

A change in the angle θ of the mirror required a change in the scale reading as sighted through the eyepiece. Small translations of the mirror up or down have little effect on the scale reading. Thus, only twist about the y-axis (perpendicular to the plane of the paper) is observed.

Loading at the jth spanwise station of the 0.25c yields the influence coefficients due to normal force of the ith spanwise station. Thus

$$A_{ij} = \frac{\theta_i}{(\text{Load})_j} \frac{\text{deg}}{\text{lb}}$$

where

$$\theta_i = \frac{1}{2} \tan^{-1} \frac{(a_{\theta j} - a_{0j})}{d}$$

Loading at the j th spanwise station of the $0.65c$ yields the influence coefficients due to a moment about the y -axis through the $0.25c$ of the i th station; thus,

$$B_{ij} = \frac{\frac{\theta_{i0.65c}}{\text{Load } j} - A_{ij}}{(0.65c - 0.25c)_j} \frac{\text{deg}}{\text{in-lb}}$$

where

$$\theta_{i0.65c} = \frac{1}{2} \tan^{-1} \frac{(a_{\theta j} - a_{0j})0.65c}{d}$$

REFERENCES

1. Toll, Thomas A.: Longitudinal Characteristics of Wings. NACA RM L53I21b, 1953.
2. Willis, Conrad M.: Investigation of Static Longitudinal Stability Characteristics at Transonic Speeds of 30° Sweptback Wing in Wing-Body Configuration With and Without Horizontal Tail. NACA RM L57B26, 1957.
3. Solomon, William, and Schmeer, James W.: Effect of Longitudinal Wing Position on the Pressure Characteristics at Transonic Speeds of a 45° Sweptback Wing-Fuselage Model. NACA RM L52K05a, 1953.
4. Hieser, Gerald, Henderson, James H., and Swihart, John M.: Transonic Aerodynamic and Loads Characteristics of a 4-Percent-Thick Unswept-Wing-Fuselage Combination. NACA RM L54B24, 1954.
5. Runkel, Jack F., and Lee, Edwin E., Jr.: Investigation at Transonic Speeds of the Loading Over a 45° Sweptback Wing Having an Aspect Ratio of 3, a Taper Ratio of 0.2, and NACA 65A004 Airfoil Sections. NACA RM L56F12, 1956.
6. Swihart, John M., and Foss, Willard E., Jr.: Transonic Loads Characteristics of a 3-Percent-Thick 60° Delta-Wing-Body Combination. NACA RM L57D12, 1957.
7. Ward, Vernon G., Whitcomb, Charles F., and Pearson, Merwin D.: Air-Flow and Power Characteristics of the Langley 16-Foot Transonic Tunnel With Slotted Test Section. NACA RM L52E01, 1952.
8. Küchemann, D.: Types of Flow on Swept Wings With Special Reference to Free Boundaries and Vortex Sheets. Jour. R.A.S., vol. 57, no. 512, Nov. 1953, pp. 683-699.
9. Furlong, G. Chester, and McHugh, James G.: A Summary and Analysis of the Low-Speed Longitudinal Characteristics of Swept Wings at High Reynolds Number. NACA Rep. 1339, 1957. (Supersedes NACA RM L52D16.)
10. Jaquet, Byron M.: Effects of Chord Discontinuities and Chordwise Fences on Low-Speed Static Longitudinal Stability of an Airplane Model Having a 35° Sweptback Wing. NACA RM L52C25, 1952.

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
 RANGE OF ANGLE OF ATTACK AND MACH NUMBER

		Pressure coefficient at:												
		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2
	Percent c	M = 0.80 α = -1.9½°							M = 0.80 α = -0.04°					
Upper surface	0.00	.041	.631	.569	.510	.454	.299		.050	.677	.640	.661	.624	.675
	1.25	.290	.223	.257	.287	.288	.288		.161	.001	-.009	-.026	-.048	.068
	2.50	.238	.132	.148	.172	.203	.193		.120	-.049	-.050	-.066	-.070	-.068
	5.00	.164	.099	.096	.109	.114	.145		.031	-.049	-.051	-.071	-.088	-.082
	7.50	.145	.065	.083	.065	.067	.083		.034	-.049	-.056	-.089	-.109	-.107
	10.00	.092	.040	.046	.038	.037	.033		-.012	-.055	-.079	-.100	-.109	-.124
	15.00	.061	.010	.003	.020	.006	-.035		-.020	-.075	-.096	-.098	-.117	-.145
	20.00	.022	-.017	-.025	-.014	-.020	-.072		-.035	-.094	-.116	-.112	-.126	-.145
	25.00	-.006	-.020	-.041	-.048	-.053	-.109		-.071	-.096	-.118	-.135	-.151	-.156
	30.00	-.024	-.042	-.051	-.061	-.068	-.103		-.075	-.104	-.124	-.137	-.152	-.136
	35.00	-.054	-.061	-.069	-.069	-.085	-.114		-.104	-.120	-.136	-.139	-.158	-.141
	40.00	-.068	-.065	-.080	-.090	-.093	-.152		-.113	-.120	-.139	-.149	-.158	-.175
	45.00	-.068	-.073	-.093	-.100	-.114	-.130		-.110	-.120	-.145	-.149	-.166	-.145
	50.00	-.054	-.084	-.099	-.108	-.119	-.134		-.092	-.120	-.144	-.149	-.161	-.141
	55.00	-.063	-.091	-.103	-.108	-.125	-.126		-.088	-.124	-.143	-.146	-.158	-.127
	60.00	-.087	-.092	-.097	-.103	-.114	-.100		-.112	-.124	-.131	-.136	-.138	-.094
Lower surface	65.00	-.079	-.083	-.086	-.089	-.094	-.112		-.095	-.103	-.114	-.109	-.110	-.106
	70.00	-.072	-.074	-.072	-.075	-.082	-.087		-.087	-.092	-.092	-.089	-.092	-.058
	75.00	-.066	-.065	-.058	-.055	-.058	-.055		-.079	-.076	-.072	-.064	-.065	-.043
	80.00	-.056	-.050	-.034	-.030	-.034	-.034		-.063	-.059	-.049	-.038	-.036	-.022
	85.00	-.051	-.028	-.017	-.011	-.007	-.015		-.056	-.033	-.024	-.011	-.005	.005
	90.00	-.021	-.016	.007	.017	.021	-.003		-.015	-.013	.001	.011	.030	.019
	95.00	.014	.006	.032	.043	.021	-.008		.023	.009	.033	.049	.037	.019
	1.25	-.032	-.308	-.438	-.689	-.942	-.760		.135	.008	-.038	-.072	-.081	-.108
	2.50	-.077	-.262	-.331	-.436	-.547	-.646		.076	-.044	-.063	-.079	-.085	-.103
	5.00	-.094	-.188	-.238	-.317	-.403	-.545		.044	-.027	-.061	-.073	-.081	-.104
	7.50	-.107	-.184	-.229	-.287	-.346	-.441		.019	-.049	-.078	-.091	-.093	-.116
	10.00	-.137	-.178	-.216	-.280	-.319	-.376		-.016	-.060	-.092	-.108	-.106	-.126
	15.00	-.137	-.172	-.201	-.250	-.290	-.294		-.032	-.071	-.094	-.113	-.124	-.143
	20.00	-.159	-.151	-.201	-.253	-.272	-.249		-.112	-.081	-.112	-.141	-.134	-.156
	25.00	-.164	-.161	-.187	-.232	-.252	-.216		-.072	-.071	-.112	-.136	-.134	-.145
	30.00	-.134	-.171	-.190	-.228	-.243	-.206		-.057	-.093	-.121	-.137	-.139	-.145
35.00	-.148	-.181	-.194	-.229	-.243	-.181		-.077	-.108	-.132	-.149	-.158	-.119	
40.00	-.169	-.176	-.196	-.223	-.225	-.191		-.097	-.113	-.141	-.155	-.147	-.141	
45.00	-.149	-.185	-.195	-.221	-.221	-.187		-.084	-.122	-.146	-.162	-.156	-.147	
50.00	-.178	-.186	-.193	-.213	-.207	-.177		-.121	-.132	-.141	-.162	-.147	-.141	
55.00	-.172	-.178	-.191	-.184	-.194	-.152		-.117	-.129	-.132	-.143	-.154	-.119	
60.00	-.162	-.166	-.175	-.167	-.170	-.132		-.112	-.122	-.129	-.135	-.136	-.101	
65.00	-.144	-.150	-.163	-.151	-.150	-.123		-.102	-.110	-.114	-.125	-.122	-.093	
70.00	-.124	-.124	-.138	-.118	-.116	-.098		-.083	-.093	-.096	-.098	-.084	-.071	
75.00	-.137	-.116	-.116	-.100	-.094	-.084		-.104	-.089	-.084	-.079	-.070	-.054	
80.00	-.101	-.090	-.101	-.066	-.069	-.063		-.073	-.067	-.061	-.051	-.044	-.035	
85.00	-.078	-.061	-.073	-.031	-.041	-.021		-.055	-.043	-.027	-.021	-.023	.005	
90.00	-.044	-.034	-.038	-.003	-.001	-.021		-.025	-.019	-.006	.009	.011	.005	
95.00	-.009	-.006	-.016	.024	.030	.017		.012	.004	.034	.026	.037	.037	
		M = 0.80 α = 1.9½°							M = 0.80 α = 3.90°					
Upper surface	0.00	.025	.561	.447	.449	.419	.606		.030	.341	.191	.124	.067	.505
	1.25	-.027	-.339	-.484	-.667	-.797	-.557		-.236	-.001	-.909	-.1014	-.1008	-.671
	2.50	-.061	-.304	-.357	-.459	-.576	-.660		-.256	-.736	-.815	-.968	-.981	-.733
	5.00	-.168	-.249	-.285	-.352	-.423	-.543		-.367	-.578	-.715	-.902	-.932	-.718
	7.50	-.160	-.207	-.254	-.312	-.377	-.488		-.335	-.379	-.588	-.844	-.884	-.704
	10.00	-.158	-.196	-.247	-.300	-.329	-.385		-.296	-.344	-.504	-.768	-.826	-.688
	15.00	-.148	-.201	-.240	-.265	-.301	-.314		-.255	-.319	-.401	-.603	-.722	-.656
	20.00	-.143	-.211	-.245	-.254	-.285	-.268		-.226	-.307	-.367	-.466	-.607	-.619
	25.00	-.185	-.196	-.228	-.258	-.283	-.246		-.274	-.287	-.337	-.386	-.507	-.574
	30.00	-.173	-.204	-.228	-.253	-.273	-.223		-.250	-.285	-.315	-.343	-.416	-.525
	35.00	-.208	-.213	-.233	-.243	-.266	-.212		-.276	-.285	-.308	-.317	-.355	-.472
	40.00	-.204	-.208	-.228	-.248	-.248	-.234		-.264	-.264	-.289	-.304	-.313	-.421
	45.00	-.201	-.204	-.226	-.239	-.248	-.203		-.259	-.254	-.277	-.285	-.289	-.372
	50.00	-.171	-.199	-.218	-.230	-.226	-.195		-.221	-.242	-.265	-.268	-.259	-.320
	55.00	-.157	-.195	-.210	-.211	-.215	-.178		-.190	-.231	-.248	-.245	-.237	-.280
	60.00	-.182	-.188	-.194	-.187	-.187	-.147		-.214	-.215	-.218	-.221	-.206	-.243
65.00	-.158	-.160	-.168	-.155	-.154	-.149		-.186	-.181	-.196	-.181	-.166	-.211	
70.00	-.145	-.143	-.141	-.133	-.131	-.106		-.164	-.159	-.158	-.151	-.144	-.179	
75.00	-.129	-.122	-.117	-.102	-.101	-.091		-.144	-.137	-.133	-.121	-.113	-.159	
80.00	-.107	-.093	-.086	-.078	-.070	-.066		-.116	-.105	-.096	-.083	-.077	-.137	
85.00	-.095	-.068	-.054	-.035	-.040	-.040		-.100	-.072	-.070	-.058	-.043	-.115	
90.00	-.054	-.043	-.025	-.015	-.001	-.023		-.054	-.041	-.038	-.026	-.006	-.094	
95.00	-.013	-.018	.010	.023	.013	-.018		-.010	-.013	.003	.014	.002	-.079	
Lower surface	1.25	.257	.228	.230	.268	.321	.246		.403	.416	.410	.457	.511	.404
	2.50	.190	.130	.152	.181	.210	.180		.339	.301	.328	.358	.392	.331
	5.00	.147	.096	.094	.114	.132	.118		.282	.231	.234	.249	.282	.260
	7.50	.108	.052	.046	.065	.090	.063		.230	.174	.181	.191	.225	.188
	10.00	.070	.025	.017	.033	.048	.023		.183	.141	.144	.145	.174	.133
	15.00	.035	.002	-.004	-.004	.002	-.043		.142	.111	.104	.098	.114	.045
	20.00	-.001	-.008	-.029	-.041	-.029	-.087		.096	.099	.068	.049	.074	-.016
	25.00	-.017	-.017	-.042	-.061	-.055	-.103		.072	.059	.031	.024	.038	-.061
	30.00	-.018	-.045	-.061	-.071	-.072	-.117		.058	.029	.012	.001	.013	-.089
	35.00	-.045	-.064	-.077	-.097	-.097	-.101		.016	.003	-.010	-.027	-.016	-.103
	40.00	-.066	-.078	-.091	-.106	-.101	-.138		.002	-.014	-.027	-.042	-.028	-.112
	45.00	-.057	-.093	-.102	-.123	-.115	-.150		.004	-.033	-.040	-.068	-.050	-.122
	50.00	-.100	-.106	-.115	-.130	-.122	-.147		-.045	-.049	-.060	-.079	-.064	-.125
	55.00	-.106	-.112	-.112	-.118	-.135	-.128		-.054	-.060	-.062	-.074	-.082	-.110
	60.00	-.103	-.111	-.115	-.115	-.126	-.118		-.054	-.063	-.071	-.079	-.084	-.106
	65.00	-.097	-.102	-.102	-.112	-.119	-.117		-.054	-.061	-.066	-.068	-.068	-.109
70.00	-.090	-.093	-.087	-.093	-.091	-.102		-.054	-.064	-.060	-.069	-.063	-.089	
75.00	-.113	-.095	-.085	-.082	-.080	-.080		-.080	-.059	-.058	-.064	-.059	-.081	
80.00	-.088	-.073	-.067	-.057	-.059	-.061		-.056	-.045	-.045	-.045	-.044	-.070	
85.00	-.071	-.056	-.040	-.032	-.042	-.027		-.048	-.030	-.025	-.023	-.028	-.033	
90.00	-.047	-.034	-.023	-.008	-.010	-.030		-.028	-.016	-.011	-.003	-.004	-.050	
95.00	-.009	-.015	.008	.010	.014	.002		-.001	-.004	.016	.008	.017	-.026	

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient at:

	0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2								
Upper surface	Percent c	M = 0.80					$\alpha = 5^\circ 21'$					M = 0.80					$\alpha = 7.95^\circ$				
	0.00	.0039	.1107	-.054	-.3860	-.197	.396		.029	-.132	.343	.465	.449	.247							
	1.25	-.065	-.1473	-.1402	-.1014	-.811	.519		-.671	-.1619	-.1327	.928	.700	-.475							
	2.50	-.504	-.1276	-.1108	-.1014	-.805	.546		-.734	-.1574	-.1318	.923	.697	-.484							
	5.00	-.643	-.1057	-.1088	-.1007	-.797	.546		-.884	-.1427	-.1342	.913	.689	-.479							
	7.50	-.510	-.811	-.1047	-.1003	-.785	.546		-.800	-.1281	-.1323	.903	.682	-.479							
	10.00	-.481	-.502	-.1007	-.995	-.777	.549		-.722	-.1081	-.1312	.890	.677	-.481							
	15.00	-.371	-.393	-.853	-.965	-.750	.513		-.522	-.860	-.1213	.869	.668	-.486							
	20.00	-.330	-.393	-.853	-.888	-.742	.549		-.442	-.475	-.1087	.847	.657	-.486							
	25.00	-.371	-.360	-.458	-.818	-.716	.542		-.485	-.429	-.889	.827	.642	-.485							
	30.00	-.339	-.353	-.352	-.705	-.688	.530		-.423	-.407	-.588	.795	.624	-.485							
	35.00	-.351	-.345	-.316	-.606	-.660	.515		-.412	-.386	-.367	.766	.604	-.481							
	40.00	-.322	-.315	-.299	-.486	-.620	.499		-.372	-.352	-.283	.753	.583	-.475							
	45.00	-.310	-.296	-.285	-.400	-.592	.476		-.353	-.337	-.280	.703	.568	-.471							
50.00	-.268	-.280	-.268	-.332	-.542	.458		-.317	-.318	-.280	.664	.545	-.463								
55.00	-.223	-.262	-.256	-.279	-.502	.440		-.267	-.303	-.276	.617	.529	-.454								
60.00	-.241	-.240	-.233	-.247	-.462	.415		-.283	-.283	-.257	.580	.511	-.444								
65.00	-.205	-.207	-.195	-.204	-.413	.388		-.242	-.243	-.233	.518	.489	-.437								
70.00	-.182	-.179	-.168	-.166	-.369	.368		-.226	-.220	-.206	.466	.429	-.408								
75.00	-.159	-.150	-.143	-.139	-.324	.349		-.197	-.191	-.189	.417	.451	-.423								
80.00	-.127	-.119	-.76	-.089	-.281	.328		-.160	-.157	-.150	.374	.432	-.418								
85.00	-.107	-.084	-.067	-.067	-.237	.307		-.139	-.121	-.120	.325	.408	-.418								
90.00	-.059	-.051	-.037	-.034	-.185	.295		-.090	-.086	-.082	.283	.380	-.417								
95.00	-.011	-.018	.006	.005	-.156	.281		-.037	-.045	-.031	.225	.369	-.413								
Lower surface																					
	1.25	.531	.547	.536	.570	.592	.464		.637	.638	.615	.621	.629	.500							
	2.50	.472	.430	.448	.475	.494	.394		.593	.529	.534	.540	.550	.437							
	5.00	.406	.343	.350	.364	.384	.326		.515	.436	.436	.437	.449	.374							
	7.60	.348	.282	.285	.302	.321	.254		.444	.367	.371	.375	.387	.299							
	10.00	.292	.247	.249	.256	.263	.198		.383	.331	.328	.326	.327	.247							
	15.00	.225	.193	.189	.196	.198	.138		.316	.263	.263	.263	.263	.176							
	20.00	.182	.174	.174	.143	.153	.040		.251	.237	.211	.198	.207	.076							
	25.00	.149	.129	.114	.105	.109	-.010		.212	.189	.173	.161	.157	.029							
	30.00	.125	.092	.088	.083	.079	-.049		.184	.149	.135	.131	.123	-.015							
	35.00	.070	.064	.059	.048	.040	-.052		.112	.116	.107	.090	.084	-.027							
	40.00	.064	.043	.044	.027	.022	-.086		.112	.001	.077	.063	.056	-.074							
	45.00	.057	.021	.016	.001	-.002	-.117		.103	.065	.052	.033	.026	-.114							
	50.00	-.010	-.016	-.011	-.023	-.050	-.124		.043	.039	.030	.009	-.003	-.130							
	55.00	-.010	-.016	-.011	-.023	-.050	-.124		.022	.020	.015	-.003	-.037	-.133							
60.00	-.010	-.025	-.026	-.039	-.059	-.124		.022	.004	-.002	-.020	-.056	-.141								
65.00	-.020	-.029	-.026	-.049	-.072	-.133		.005	-.006	-.011	-.038	-.075	-.154								
70.00	-.015	-.025	-.024	-.041	-.058	-.121		.001	-.011	-.017	-.039	-.075	-.153								
75.00	-.015	-.031	-.027	-.052	-.075	-.124		.001	-.027	-.031	-.066	-.106	-.171								
80.00	-.036	-.027	-.015	-.031	-.056	-.121		-.028	-.021	-.025	-.049	-.101	-.171								
85.00	-.028	-.017	.000	-.015	-.059	-.101		-.028	-.015	-.014	-.053	-.121	-.149								
90.00	-.015	-.006	.007	-.005	-.054	-.134		-.020	-.012	-.012	-.060	-.137	-.206								
95.00	.010	.005	.028	.009	-.062	-.145		.000	-.009	.009	.085	-.187	-.226								
Upper surface																					
	0.00	.036	-.351	-.605	-.656	-.599	.087		.047	-.575	-.835	-.922	-.763	-.094							
	1.25	-.821	-.1733	-.1270	-.783	-.626	-.452		-.4957	-.1640	-.1026	-.726	-.600	-.440							
	2.50	-.905	-.1714	-.1252	-.777	-.625	-.453		-.1050	-.1611	-.1019	-.718	-.595	-.438							
	5.00	-.1043	-.1598	-.1241	-.771	-.617	-.453		-.1182	-.261	-.125	-.586	-.516	-.386							
	7.50	.902	-.1341	-.1207	-.756	-.612	-.450		-.1100	-.1449	-.983	-.718	-.579	-.438							
	10.00	.666	-.992	-.1160	-.742	-.608	-.455		-.1000	-.1366	-.972	-.715	-.579	-.438							
	15.00	-.508	-.414	-.1090	-.727	-.604	-.455		-.673	-.1226	-.945	-.712	-.576	-.440							
	20.00	-.483	-.392	-.1023	-.705	-.599	-.457		-.552	-.939	-.930	-.699	-.571	-.440							
	25.00	-.511	-.409	-.920	-.689	-.583	.050		-.539	-.662	-.926	-.689	-.566	-.440							
	30.00	-.409	-.357	-.687	-.584	-.462			-.516	-.616	-.906	-.674	-.556	-.444							
	35.00	-.400	-.378	-.696	-.656	-.574	-.463		-.489	-.475	-.862	-.651	-.560	-.444							
	40.00	-.384	-.367	-.591	-.642	-.567	-.463		-.450	-.435	-.822	-.643	-.555	-.447							
	45.00	-.361	-.357	-.513	-.626	-.555	-.463		-.435	-.420	-.772	-.626	-.553	-.450							
50.00	-.311	-.349	-.445	-.614	-.544	-.463		-.420	-.406	-.716	-.616	-.549	-.453								
55.00	-.326	-.334	-.393	-.588	-.536	-.463		-.357	-.394	-.651	-.599	-.537	-.454								
60.00	-.298	-.370	-.385	-.585	-.531	-.463		-.372	-.369	-.609	-.579	-.537	-.457								
65.00	-.276	-.275	-.318	-.547	-.507	-.465		-.341	-.344	-.554	-.574	-.529	-.461								
70.00	-.248	-.248	-.280	-.518	-.495	-.466		-.324	-.326	-.515	-.555	-.521	-.466								
75.00	-.207	-.215	-.251	-.493	-.484	-.468		-.300	-.304	-.472	-.534	-.517	-.468								
80.00	-.179	-.174	-.212	-.472	-.470	-.473		-.262	-.273	-.438	-.520	-.509	-.472								
85.00	-.126	-.131	-.167	-.437	-.449	-.475		-.235	-.237	-.386	-.507	-.497	-.478								
90.00	-.068	-.086	-.117	-.439	-.441	-.477		-.179	-.194	-.348	-.491	-.483	-.488								
95.00								-.104	-.141	-.293	-.479	-.481	-.491								
Lower surface																					
	1.25	.733	.709	.667	.657	.645	.531		.805	.761	.708	.689	.660	.556							
	2.50	.703	.615	.607	.600	.588	.477		.801	.687	.658	.644	.625	.509							
	5.00	.625	.520	.513	.503	.501	.418		.720	.593	.631	.627	.554	.460							
	7.50	.545	.449	.442	.445	.440	.340		.631	.527	.577	.579	.494	.399							
	10.00	.425	.397	.395	.385	.385	.291		.558	.484	.471	.452	.441	.349							
	15.00	.397	.340	.332	.331	.317	.203		.471	.411	.400	.386	.375	.255							
	20.00	.325	.305	.272	.259	.260	.130		.398	.375	.343	.316	.313	.179							
	25.00	.285	.252	.232	.217	.209	.075		.351	.318	.295	.276	.265	.123							
	30.00	.250	.210	.197	.185	.169	.022		.311	.271	.250	.242	.231	.077							
	35.00	.172	.174	.162	.135	.123	.000		.231	.214	.210	.199	.177	.047							
	40.00								.224	.199	.187	.153	.149	-.006							
	45.00	.156	.113	.103	.073	.064	-.090		.209	.164	.149	.125	.114	-.053							
	50.00	.097	.084	.069	.042	.030	-.115		.146	.132	.119	.087	.077	-.081							
55.00	.066	.058	.049	.029	-.006	-.123		.112	.104	.091	.068	.058	-.094								
60.00	.066	.040	.026	.008	-.035	-.133		.013	.013	.008	.008	.008	-.094								
65.00	.011	.022	.013	-.021	-.062	-.160		.080	.057	.049	.039	.002	-.114								
70.00	.029	.014	.003	-.033	-.065	-.159		.059	.048	.025	-.005	-.074	-.141								
75.00	.004	-.003	-.015	-.047	-.089	-.173		.032	.018	.005	-.029	-.059	-.157								
80.00	-.013	-.010	-.022	-.056	-.104	-.186		.010	.005	-.005	-.046	-.083	-.172								
85.00	-.020	-.014	-.024	-.067	-.132	-.172		-.008	-.006	-.023	-.072	-.118	-.162								
90.00	-.020	-.018	-.033	-.104	-.159	-.228		-.019	-.021	-.034	-.094	-.153	-.221								
95.00	-.015	-.025	-.031	-.167	-.225	-.252		-.031	-.048	-.084	-.189	-.223	-.247								

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient at:

	0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2	
Upper surface	Percent c	M = 0.80						M = 0.80						
		α = 13.95°						α = 17.24°						
	0.00	0.022	-0.849	-1.079	-1.081	-0.665	-0.333	0.002	-1.047	-1.017	-0.753	-0.646	-0.573	
	1.25	-1.106	-1.338	-1.009	-0.724	-0.622	-0.493	-0.849	-0.879	-0.795	-0.723	-0.623	-0.541	
	2.50	-1.265	-1.380	-1.035	-0.703	-0.621	-0.491	-0.826	-0.884	-0.785	-0.701	-0.627	-0.541	
	5.00	-1.293	-1.328	-0.973	-0.699	-0.617	-0.491	-0.840	-0.885	-0.795	-0.692	-0.624	-0.540	
	7.50	-1.250	-1.279	-0.947	-0.698	-0.611	-0.491	-0.856	-0.906	-0.799	-0.690	-0.617	-0.541	
	10.00	-1.098	-1.248	-0.957	-0.698	-0.611	-0.491	-0.867	-0.896	-0.809	-0.687	-0.621	-0.544	
	15.00	-0.847	-1.187	-0.970	-0.696	-0.621	-0.492	-0.853	-0.878	-0.801	-0.686	-0.617	-0.548	
	20.00	-0.740	-1.089	-0.996	-0.681	-0.600	-0.482	-0.846	-0.874	-0.785	-0.674	-0.610	-0.547	
	25.00	-0.674	-0.979	-0.873	-0.689	-0.598	-0.492	-0.772	-0.855	-0.773	-0.680	-0.608	-0.549	
	30.00	-0.677	-0.863	-0.855	-0.680	-0.595	-0.494	-0.735	-0.829	-0.761	-0.674	-0.608	-0.552	
	35.00	-0.576	-0.776	-0.836	-0.673	-0.593	-0.495	-0.675	-0.808	-0.756	-0.674	-0.606	-0.557	
	40.00	-0.533	-0.675	-0.810	-0.666	-0.593	-0.498	-0.635	-0.773	-0.750	-0.674	-0.606	-0.554	
	45.00	-0.511	-0.611	-0.789	-0.661	-0.591	-0.500	-0.598	-0.748	-0.743	-0.670	-0.607	-0.559	
	50.00	-0.504	-0.560	-0.749	-0.650	-0.590	-0.504	-0.581	-0.715	-0.739	-0.670	-0.608	-0.560	
	55.00	-0.441	-0.525	-0.725	-0.645	-0.588	-0.507	-0.572	-0.688	-0.729	-0.666	-0.608	-0.562	
	60.00	-0.465	-0.507	-0.691	-0.630	-0.588	-0.509	-0.560	-0.673	-0.719	-0.658	-0.612	-0.566	
	65.00	-0.444	-0.477	-0.662	-0.625	-0.585	-0.513	-0.542	-0.651	-0.709	-0.657	-0.612	-0.572	
	70.00	-0.436	-0.460	-0.636	-0.613	-0.581	-0.516	-0.550	-0.638	-0.698	-0.656	-0.611	-0.575	
	75.00	-0.409	-0.447	-0.614	-0.601	-0.579	-0.523	-0.522	-0.622	-0.686	-0.645	-0.615	-0.574	
	80.00	-0.380	-0.417	-0.588	-0.589	-0.574	-0.527	-0.508	-0.601	-0.673	-0.639	-0.615	-0.580	
	85.00	-0.362	-0.387	-0.555	-0.582	-0.566	-0.533	-0.502	-0.569	-0.659	-0.636	-0.610	-0.586	
	90.00	-0.307	-0.356	-0.527	-0.568	-0.557	-0.537	-0.481	-0.545	-0.639	-0.628	-0.602	-0.588	
	95.00	-0.217	-0.293	-0.490	-0.561	-0.557	-0.541	-0.414	-0.505	-0.621	-0.623	-0.606	-0.590	
Lower surface	1.25	0.846	0.790	0.722	0.674	0.642	0.550	0.906	0.826	0.738	0.675	0.626	0.541	
	2.50	0.871	0.731	0.690	0.663	0.634	0.514	0.965	0.800	0.736	0.690	0.656	0.528	
	5.00	0.780	0.647	0.615	0.586	0.573	0.474	0.872	0.731	0.677	0.646	0.620	0.506	
	7.50	0.685	0.576	0.544	0.526	0.522	0.416	0.776	0.666	0.621	0.599	0.578	0.459	
	10.00	0.607	0.528	0.508	0.485	0.466	0.359	0.699	0.616	0.580	0.556	0.538	0.413	
	15.00	0.514	0.457	0.435	0.414	0.400	0.273	0.604	0.542	0.513	0.486	0.461	0.326	
	20.00	0.440	0.415	0.424	0.405	0.390	0.245	0.533	0.490	0.451	0.427	0.406	0.252	
	25.00	0.385	0.354	0.328	0.295	0.289	0.137	0.469	0.437	0.401	0.373	0.356	0.186	
	30.00	0.340	0.305	0.280	0.258	0.247	0.082	0.423	0.384	0.354	0.329	0.308	0.123	
	35.00	0.254	0.259	0.238	0.215	0.197	0.049	0.334	0.337	0.309	0.282	0.257	0.092	
	40.00	0.247	0.225	0.203	0.176	0.166	-0.005	0.319	0.298	0.269	0.241	0.225	0.034	
	45.00	0.228	0.188	0.170	0.132	0.123	-0.058	0.297	0.256	0.230	0.198	0.183	-0.023	
	50.00	0.143	0.149	0.131	0.095	0.085	-0.115	0.215	0.188	0.160	0.138	0.150	-0.150	
	55.00	0.123	0.118	0.104	0.077	0.043	-0.100	0.181	0.172	0.159	0.130	0.092	-0.079	
	60.00	0.120	0.089	0.069	0.038	0.006	-0.125	0.173	0.147	0.120	0.095	0.051	-0.103	
	65.00	0.077	0.061	0.047	0.005	-0.026	-0.152	0.122	0.108	0.092	0.055	0.012	-0.129	
	70.00	0.047	0.042	0.025	-0.012	-0.042	-0.161	0.081	0.084	0.057	0.030	-0.003	-0.147	
	75.00	0.025	0.012	-0.009	-0.042	-0.074	-0.182	0.050	0.041	0.022	0.005	-0.042	-0.170	
	80.00	-0.006	-0.007	-0.037	-0.087	-0.107	-0.199	-0.019	-0.019	-0.029	-0.037	-0.073	-0.194	
	85.00	-0.038	-0.035	-0.053	-0.095	-0.137	-0.188	-0.013	-0.024	-0.041	-0.072	-0.119	-0.194	
	90.00	-0.068	-0.067	-0.100	-0.142	-0.176	-0.256	-0.067	-0.068	-0.100	-0.122	-0.162	-0.257	
	95.00	-0.099	-0.111	-0.144	-0.226	-0.246	-0.280	-0.163	-0.151	-0.171	-0.217	-0.240	-0.286	
	Upper surface		M = 0.80						M = 0.80					
			α = 19.29°						α = 21.30°					
		0.00	-0.017	-0.711	-0.719	-0.697	-0.627	-0.601	-0.059	-0.779	-0.771	-0.744	-0.697	-0.660
1.25		-0.698	-0.687	-0.700	-0.691	-0.618	-0.574	-0.786	-0.768	-0.762	-0.738	-0.691	-0.635	
2.50		-0.691	-0.693	-0.694	-0.673	-0.621	-0.572	-0.771	-0.769	-0.758	-0.734	-0.692	-0.634	
5.00		-0.657	-0.699	-0.701	-0.670	-0.621	-0.571	-0.742	-0.775	-0.762	-0.729	-0.690	-0.633	
7.50		-0.659	-0.702	-0.686	-0.616	-0.574	-0.574	-0.753	-0.780	-0.756	-0.727	-0.686	-0.635	
10.00		-0.667	-0.707	-0.702	-0.658	-0.618	-0.580	-0.758	-0.780	-0.762	-0.727	-0.688	-0.636	
15.00		-0.683	-0.713	-0.705	-0.663	-0.618	-0.580	-0.768	-0.785	-0.765	-0.726	-0.687	-0.637	
20.00		-0.695	-0.713	-0.704	-0.662	-0.613	-0.581	-0.772	-0.787	-0.766	-0.724	-0.684	-0.638	
25.00		-0.699	-0.717	-0.710	-0.657	-0.614	-0.583	-0.772	-0.788	-0.769	-0.723	-0.684	-0.639	
30.00		-0.697	-0.717	-0.709	-0.657	-0.613	-0.585	-0.767	-0.789	-0.767	-0.720	-0.684	-0.640	
35.00		-0.681	-0.717	-0.707	-0.657	-0.614	-0.589	-0.762	-0.789	-0.769	-0.720	-0.684	-0.642	
40.00		-0.668	-0.714	-0.704	-0.659	-0.618	-0.591	-0.723	-0.780	-0.766	-0.723	-0.684	-0.643	
45.00		-0.648	-0.706	-0.704	-0.661	-0.622	-0.596	-0.693	-0.778	-0.766	-0.722	-0.686	-0.645	
50.00		-0.648	-0.706	-0.704	-0.661	-0.622	-0.596	-0.701	-0.766	-0.766	-0.723	-0.688	-0.649	
55.00		-0.633	-0.700	-0.700	-0.661	-0.623	-0.598	-0.687	-0.760	-0.763	-0.723	-0.688	-0.651	
60.00		-0.623	-0.693	-0.698	-0.655	-0.628	-0.602	-0.686	-0.756	-0.761	-0.715	-0.680	-0.654	
65.00		-0.615	-0.686	-0.686	-0.655	-0.627	-0.607	-0.681	-0.746	-0.756	-0.715	-0.679	-0.657	
70.00		-0.623	-0.682	-0.682	-0.652	-0.622	-0.607	-0.674	-0.751	-0.751	-0.711	-0.685	-0.657	
75.00		-0.599	-0.676	-0.688	-0.654	-0.634	-0.614	-0.658	-0.727	-0.742	-0.711	-0.692	-0.658	
80.00		-0.597	-0.670	-0.680	-0.652	-0.635	-0.615	-0.647	-0.715	-0.734	-0.705	-0.691	-0.660	
85.00		-0.594	-0.649	-0.672	-0.651	-0.632	-0.623	-0.638	-0.693	-0.726	-0.705	-0.688	-0.662	
90.00		-0.588	-0.637	-0.666	-0.647	-0.626	-0.626	-0.616	-0.672	-0.715	-0.700	-0.677	-0.661	
95.00		-0.551	-0.610	-0.658	-0.641	-0.629	-0.629	-0.534	-0.627	-0.706	-0.693	-0.686	-0.660	
Lower surface	1.25	0.920	0.842	0.741	0.666	0.603	0.525	0.899	0.848	0.736	0.646	0.566	0.502	
	2.50	0.999	0.834	0.758	0.696	0.656	0.525	1.005	0.858	0.768	0.672	0.651	0.514	
	5.00	0.922	0.771	0.715	0.668	0.636	0.513	0.944	0.813	0.743	0.691	0.655	0.517	
	7.50	0.823	0.710	0.666	0.626	0.603	0.476	0.858	0.757	0.704	0.658	0.600	0.489	
	10.00	0.674	0.665	0.623	0.590	0.562	0.437	0.796	0.711	0.682	0.628	0.593	0.462	
	15.00	0.657	0.593	0.521	0.494	0.453	0.329	0.695	0.641	0.603	0.568	0.530	0.380	
	20.00	0.580	0.525	0.501	0.460	0.444	0.281	0.615	0.573	0.544	0.507	0.480	0.312	
	25.00	0.523	0.487	0.446	0.411	0.395	0.218	0.564	0.530	0.490	0.461	0.433	0.247	
	30.00	0.477	0.432	0.402	0.372	0.348	0.155	0.514	0.476	0.443	0.415	0.386	0.184	
	35.00	0.387	0.385	0.353	0.323	0.297	0.120	0.431	0.428	0.401	0.368	0.336	0.143	
	40.00	0.375	0.340	0.281	0.261	0.242	0.077	0.412	0.392	0.372	0.342	0.311	0.091	
	45.00	0.343	0.306	0.273	0.232	0.221	0.001	0.385	0.342	0.318	0.282	0.259	0.026	
	50.00	0.275	0.263	0.232	0.197	0.178	-0.030	0.310	0.300	0.274	0.240	0.216	0.036	
	55.00	0.229	0.221	0.200	0.169	0.128	-0.056	0.268	0.263	0.240	0.209	0.164	-0.036	
	60.00	0.214	0.185	0.157	0.130	0.084	-0.083	0.246	0.219	0.198	0.164	0.117	-0.063	
	65.00	0.163	0.141	0.128	0.086	0.046	-0.112	0.193	0.180	0.161	0.123	0.081	-0.096	
	70.00	0.115	0.116	0.092	0.086	0.027	-0.137	0.137	0.148	0.124	0.094	0.057	-0.125	
	75.00	0.085	0.071	0.089	0.017	0.010	-0.167	0.097	0.106	0.082	0.052	0.012	-0.151	
	80.00	0.042	0.036	0.016	-0.015	-0.053	-0.191	0.066	0.063	0.042	0.011	-0.027	-0.183	
	85.00	0.001	-0.003	-0.020	-0.054	-0.095	-0.193	0.013	0.023	0.005	-0.024	-0.073	-0.182	
	90.00	-0.036	-0.055	-0.079	-0.106	-0.145	-0.260	-0.042	-0.033	-0.060	-0.085	-0.129	-0.259	
	95.00	-0.163	-0.147	-0.161	-0.206	-0.227	-0.2							

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
 RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

		Pressure coefficient at:												
		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2
	Percent c	M = 0.80 α = 23.46°							M = 0.80 α = 25.45°					
Upper surface	0.00	-.134	-.955	-.946	-.956	-.875	-.823		-.191	-1.032	-1.028	-1.029	-.964	-.865
	1.25	-.957	-.951	-.942	-.923	-.865	-.778		-1.049	-1.032	-1.029	-1.017	-.950	-.812
	2.50	-.949	-.921	-.936	-.913	-.865	-.776		-1.032	-1.032	-1.023	-1.001	-.950	-.811
	5.00	-.932	-.952	-.941	-.909	-.863	-.773		-1.021	-1.035	-1.029	-.995	-.947	-.809
	7.50	-.942	-.953	-.935	-.907	-.858	-.774		-1.026	-1.035	-1.022	-.995	-.940	-.808
	10.00	-.945	-.955	-.941	-.908	-.858	-.773		-1.030	-1.039	-1.030	-.994	-.939	-.807
	15.00	-.944	-.958	-.944	-.905	-.856	-.773		-1.030	-1.043	-1.032	-.991	-.936	-.807
	20.00	-.940	-.958	-.944	-.902	-.854	-.772		-1.022	-1.041	-1.031	-.987	-.934	-.804
	25.00	-.928	-.959	-.944	-.900	-.852	-.772		-.986	-1.039	-1.031	-.984	-.930	-.801
	30.00	-.909	-.953	-.944	-.898	-.849	-.773		-.932	-1.032	-1.030	-.983	-.927	-.803
	35.00	-.841	-.948	-.942	-.898	-.848	-.777		-.865	-1.021	-1.030	-.981	-.925	-.805
	40.00	-.801	-.931	-.943	-.899	-.847	-.778		-.830	-.991	-1.028	-.981	-.920	-.806
	45.00	-.775	-.919	-.941	-.895	-.847	-.779		-.800	-.954	-1.025	-.977	-.919	-.807
	50.00	-.753	-.887	-.940	-.895	-.846	-.780		-.732	-.888	-1.019	-.975	-.916	-.807
	55.00	-.724	-.860	-.934	-.892	-.845	-.781		-.687	-.814	-1.007	-.971	-.912	-.806
Lower surface	60.00	-.717	-.831	-.927	-.881	-.845	-.780		-.637	-.736	-.981	-.958	-.909	-.803
	65.00	-.680	-.780	-.918	-.881	-.843	-.781		-.573	-.645	-.959	-.954	-.905	-.801
	70.00	-.640	-.740	-.903	-.881	-.836	-.778		-.548	-.586	-.935	-.952	-.900	-.796
	75.00	-.596	-.692	-.886	-.869	-.837	-.778		-.511	-.518	-.886	-.941	-.898	-.792
	80.00	-.555	-.632	-.862	-.866	-.836	-.774		-.467	-.459	-.835	-.933	-.895	-.786
	85.00	-.525	-.563	-.830	-.862	-.827	-.774		-.462	-.400	-.774	-.918	-.885	-.783
	90.00	-.448	-.506	-.782	-.858	-.820	-.771		-.415	-.384	-.678	-.896	-.871	-.781
	95.00	-.340	-.405	-.712	-.854	-.834	-.766		-.363	-.351	-.566	-.871	-.883	-.775
	1.25	.852	.837	.715	.609	.511	.471		.813	.833	.702	.581	.476	.452
	2.50	.997	.873	.772	.685	.635	.497		.987	.894	.778	.677	.626	.489
	5.00	.970	.849	.768	.704	.666	.519		.983	.879	.795	.726	.679	.526
	7.50	.898	.799	.740	.684	.619	.503		.926	.839	.772	.711	.677	.522
	10.00	.834	.761	.705	.657	.625	.472		.867	.803	.746	.691	.659	.498
	15.00	.737	.690	.644	.602	.570	.409		.779	.737	.693	.643	.607	.441
	20.00	.669	.637	.588	.545	.521	.342		.716	.682	.641	.592	.567	.382
25.00	.612	.577	.541	.501	.477	.282		.662	.630	.592	.548	.524	.323	
30.00	.569	.527	.491	.461	.432	.215		.611	.583	.546	.505	.477	.263	
35.00	.483	.479	.447	.410	.381	.179		.538	.536	.496	.459	.432	.224	
40.00	.461	.437	.409	.367	.347	.119		.519	.493	.463	.418	.399	.164	
45.00	.434	.395	.365	.326	.305	.055		.482	.448	.419	.379	.357	.101	
50.00	.363	.349	.324	.283	.261	.021		.417	.402	.381	.335	.315	.066	
55.00	.318	.308	.289	.250	.206	-.012		.372	.365	.343	.303	.263	.032	
60.00	.301	.269	.245	.206	.161	-.044		.352	.320	.298	.260	.215	-.001	
65.00	.239	.225	.209	.165	.118	-.076		.300	.283	.262	.214	.170	-.032	
70.00	.186	.196	.174	.132	.096	-.107		.239	.252	.225	.181	.147	-.064	
75.00	.154	.145	.127	.090	.047	-.137		.206	.197	.183	.139	.096	-.100	
80.00	.116	.114	.088	.049	.004	-.172		.157	.162	.140	.093	.051	-.134	
85.00	.062	.074	.049	.007	-.047	-.175		.106	.121	.099	.046	-.002	-.141	
90.00	.010	.018	-.011	-.059	-.105	-.254		.043	.066	.037	-.019	-.064	-.225	
95.00	-.049	-.047	-.100	-.173	-.200	-.292		-.031	.000	-.044	-.135	-.164	-.264	

TABLE 1. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
 RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

		Pressure coefficient at:												
		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2	0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2	
	Percent	M = 0.90						M = 0.90						
	c	$\alpha = -2.02^\circ$						$\alpha = -0.04^\circ$						
Upper surface	0.00	.037	.676	.613	.374	.509	.371	.057	.702	.669	.554	.605	.623	
	1.25	.311	.231	.248	.273	.269	.288	.236	.101	.099	.110	.075	.130	
	2.50	.249	.139	.146	.167	.183	.171	.172	.047	.032	.029	.035	.019	
	5.00	.181	.110	.094	.101	.094	.111	.107	.033	.010	.006	.016	.037	
	7.50	.166	.072	.059	.055	.049	.062	.101	.019	-.008	-.021	-.054	-.073	
	10.00	.101	.049	.027	.033	.017	.014	.043	.003	-.034	-.047	-.056	-.106	
	15.00	.073	.017	-.014	.004	-.021	-.073	.026	-.029	-.061	-.058	-.089	-.157	
	20.00	.030	-.017	-.039	-.033	-.043	-.151	-.005	-.060	-.086	-.082	-.114	-.204	
	25.00	-.001	-.029	-.057	-.067	-.080	-.232	-.037	-.066	-.091	-.121	-.145	-.251	
	30.00	-.061	-.043	-.073	-.090	-.099	-.223	-.110	-.093	-.104	-.124	-.154	-.221	
	35.00	-.056	-.071	-.093	-.107	-.125	-.214	-.089	-.106	-.127	-.140	-.174	-.206	
	40.00	-.075	-.082	-.113	-.130	-.145	-.247	-.104	-.119	-.144	-.164	-.186	-.246	
Lower surface	45.00	-.088	-.095	-.135	-.148	-.171	-.205	-.119	-.125	-.162	-.176	-.210	-.212	
	50.00	-.073	-.114	-.146	-.164	-.188	-.192	-.101	-.136	-.174	-.190	-.219	-.193	
	55.00	-.082	-.131	-.161	-.177	-.200	-.169	-.101	-.156	-.184	-.195	-.230	-.166	
	60.00	-.126	-.136	-.151	-.167	-.183	-.133	-.150	-.159	-.171	-.195	-.200	-.116	
	65.00	-.115	-.121	-.142	-.145	-.141	-.138	-.129	-.139	-.153	-.146	-.142	-.116	
	70.00	-.108	-.112	-.120	-.120	-.116	-.079	-.111	-.117	-.121	-.105	-.102	-.063	
	75.00	-.093	-.097	-.098	-.088	-.082	-.062	-.094	-.093	-.088	-.064	-.062	-.041	
	80.00	-.076	-.069	-.067	-.053	-.044	-.035	-.068	-.062	-.051	-.018	-.025	-.016	
	85.00	-.063	-.039	-.035	-.021	-.005	-.013	-.050	-.026	.016	.002	.011	.010	
	90.00	-.020	-.020	-.008	.009	.029	.005	-.009	-.007	.014	.034	.048	.028	
	95.00	.017	.010	.026	.045	.038	.005	.030	.024	.048	.071	.057	.030	
	Upper surface	1.25	.018	-.297	-.464	-.822	-.987	-1.067	.138	-.062	-.147	-.283	-.433	-.493
2.50		-.036	-.234	-.308	-.528	-.832	-.999	.068	-.079	-.125	-.216	-.386	-.435	
5.00		-.060	-.168	-.253	-.310	-.424	-.899	.037	-.042	-.094	-.145	-.195	-.392	
7.50		-.078	-.172	-.243	-.313	-.332	-.751	.009	-.069	-.118	-.168	-.181	-.335	
10.00		-.118	-.174	-.233	-.321	-.347	-.576	-.025	-.082	-.134	-.174	-.184	-.274	
15.00		-.126	-.177	-.226	-.297	-.335	-.415	-.047	-.091	-.128	-.169	-.193	-.261	
20.00		-.152	-.162	-.235	-.297	-.342	-.399	-.083	-.091	-.147	-.200	-.209	-.288	
25.00		-.171	-.173	-.230	-.282	-.324	-.291	-.095	-.094	-.147	-.193	-.215	-.246	
30.00		-.147	-.192	-.238	-.288	-.327	-.252	-.080	-.124	-.156	-.200	-.224	-.236	
35.00		-.171	-.219	-.245	-.307	-.342	-.230	-.103	-.149	-.176	-.221	-.243	-.205	
40.00		-.207	-.212	-.257	-.320	-.345	-.247	-.135	-.153	-.188	-.231	-.247	-.229	
45.00		-.180	-.231	-.280	-.339	-.356	-.247	-.119	-.175	-.210	-.253	-.264	-.232	
Lower surface	50.00	-.234	-.259	-.301	-.349	-.350	-.228	-.175	-.196	-.223	-.265	-.264	-.207	
	55.00	-.245	-.268	-.298	-.326	-.320	-.186	-.182	-.207	-.223	-.260	-.264	-.163	
	60.00	-.254	-.264	-.284	-.288	-.233	-.145	-.194	-.207	-.211	-.220	-.212	-.127	
	65.00	-.228	-.225	-.234	-.220	-.161	-.128	-.169	-.178	-.178	-.180	-.158	-.104	
	70.00	-.192	-.176	-.168	-.138	-.098	-.104	-.145	-.141	-.137	-.122	-.091	-.076	
	75.00	-.172	-.146	-.125	-.102	-.075	-.086	-.145	-.122	-.101	-.082	-.065	-.056	
	80.00	-.115	-.103	-.085	-.059	-.041	-.065	-.094	-.082	-.065	-.042	-.031	-.033	
	85.00	-.077	-.060	-.042	-.024	-.016	-.011	-.061	-.045	-.019	-.007	-.005	.022	
	90.00	-.036	-.026	-.011	.011	.021	-.016	-.019	-.012	.016	.032	.034	.017	
	95.00	.006	.007	.026	.039	.055	.026	.022	.019	.046	.056	.067	.056	
	Upper surface	0.00	.060	.642	.542	.557	.528	.642	.041	.531	.390	.388	.342	.566
		1.25	.071	-.231	-.314	-.644	-.765	-.737	-.065	-.697	-.831	-.986	-1.065	-.970
2.50		.011	-.214	-.289	-.382	-.644	-.896	-.129	-.416	-.739	-.853	-.959	-1.156	
5.00		-.082	-.174	-.221	-.280	-.345	-.814	-.248	-.332	-.496	-.674	-.777	-1.082	
7.50		-.095	-.140	-.213	-.271	-.341	-.707	-.240	-.265	-.314	-.434	-.749	-1.003	
10.00		-.104	-.137	-.210	-.275	-.311	-.582	-.232	-.248	-.316	-.357	-.657	-.943	
15.00		-.088	-.157	-.209	-.254	-.311	-.398	-.182	-.252	-.329	-.362	-.641	-.862	
20.00		-.091	-.176	-.225	-.254	-.313	-.352	-.175	-.280	-.339	-.362	-.543	-.826	
25.00		-.148	-.170	-.222	-.261	-.308	-.297	-.242	-.259	-.322	-.372	-.425	-.737	
30.00		-.238	-.192	-.228	-.262	-.315	-.246	-.335	-.283	-.334	-.372	-.424	-.613	
35.00		-.190	-.213	-.235	-.273	-.325	-.224	-.283	-.308	-.344	-.382	-.438	-.483	
Lower surface		40.00	-.202	-.210	-.248	-.287	-.326	-.258	-.301	-.312	-.356	-.403	-.446	-.449
	45.00	-.219	-.214	-.257	-.295	-.342	-.225	-.317	-.312	-.360	-.409	-.467	-.326	
	50.00	-.197	-.226	-.270	-.302	-.332	-.205	-.294	-.317	-.365	-.419	-.472	-.257	
	55.00	-.177	-.248	-.283	-.299	-.302	-.174	-.265	-.338	-.383	-.418	-.451	-.208	
	60.00	-.234	-.248	-.262	-.269	-.221	-.125	-.336	-.352	-.382	-.400	-.323	-.151	
	65.00	-.199	-.204	-.209	-.170	-.131	-.128	-.299	-.308	-.326	-.326	-.148	-.126	
	70.00	-.163	-.157	-.148	-.104	-.088	-.077	-.241	-.227	-.202	-.129	-.080	-.087	
	75.00	-.119	-.112	-.094	-.066	-.056	-.057	-.161	-.143	-.115	-.065	-.046	-.077	
	80.00	-.078	-.073	-.054	-.026	-.023	-.031	-.103	-.091	-.072	-.030	-.020	-.061	
	85.00	-.057	-.035	-.014	.004	.016	-.005	-.075	-.052	-.032	-.001	.013	-.042	
	90.00	-.010	-.008	.016	.035	.049	.016	-.030	-.025	-.002	.027	.037	-.029	
	95.00	.029	.024	.051	.074	.063	.027	.010	.009	.032	.060	.048	-.021	
Upper surface	1.25	.299	.247	.233	.257	.293	.212	.389	.368	.352	.393	.429	.332	
	2.50	.236	.161	.165	.181	.182	.156	.321	.268	.276	.293	.307	.262	
	5.00	.190	.129	.120	.124	.130	.100	.267	.216	.211	.208	.228	.193	
	7.50	.147	.082	.070	.078	.093	.045	.215	.155	.148	.152	.177	.125	
	10.00	.111	.057	.034	.048	.053	.010	.175	.123	.103	.119	.127	.080	
	15.00	.073	.032	.015	.005	.007	-.066	.127	.091	.081	.076	.074	-.010	
	20.00	.033	.007	-.012	-.038	-.029	-.140	.081	.080	.042	.014	.034	-.092	
	25.00	.016	.002	-.021	-.056	-.057	-.193	.059	.048	.015	-.009	-.010	-.167	
	30.00	.016	-.022	-.042	-.071	-.079	-.202	.051	.012	-.010	-.030	-.035	-.199	
	35.00	-.016	-.048	-.069	-.094	-.109	-.173	.004	.016	-.035	-.057	-.068	-.176	
	40.00	-.045	-.059	-.083	-.114	-.122	-.194	-.015	-.033	-.058	-.079	-.087	-.248	
	Lower surface	45.00	-.038	-.087	-.105	-.141	-.144	-.194	-.010	-.062	-.080	-.107	-.116	-.274
50.00		-.093	-.108	-.124	-.154	-.164	-.176	-.070	-.084	-.104	-.128	-.138	-.267	
55.00		-.102	-.121	-.128	-.149	-.181	-.143	-.082	-.099	-.108	-.128	-.163	-.229	
60.00		-.116	-.125	-.130	-.145	-.164	-.119	-.097	-.106	-.117	-.128	-.163	-.179	
65.00		-.102	-.113	-.117	-.133	-.146	-.109	-.090	-.105	-.111	-.128	-.161	-.139	
70.00		-.092	-.094	-.098	-.103	-.094	-.082	-.083	-.088	-.095	-.110	-.117	-.100	
75.00		-.116	-.094	-.085	-.083	-.075	-.061	-.116	-.095	-.090	-.093	-.095	-.081	
80.00		-.078	-.064	-.052	-.045	-.037	-.041	-.085	-.072	-.065	-.063	-.062	-.061	
85.00		-.051	-.040	-.017	-.007	-.011	.013	-.062	-.046	-.033	-.025	-.035	-.005	
90.00		-.013	-.007	.011	.029	.025	.003	-.031	-.021	-.002	.010	.006	-.020	
95.00		.028	.020	.042	.047	.057	.042	.014	.004	.024	.033	.035	.018	

TABLE 1. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
 RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

		Pressure coefficient at:												
		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2
	Percent c	M = 0.90 α = 5.88°							M = 0.90 α = 7.82°					
Upper surface	0.00	.048	.395	.235	.184	.100	.448		.044	.222	.044	-.046	-.197	.308
	1.25	-.205	-1.051	-1.139	-1.198	-1.240	-.879		-.355	-1.262	-1.309	-1.318	-1.059	-.618
	2.50	-.266	-.817	-1.055	-1.110	-1.151	-1.007		-.426	-1.111	-1.239	-1.261	-1.036	-.656
	5.00	-.410	-.616	-.909	-.990	-1.049	-.968		-.580	-.863	-1.152	-1.177	-.976	-.652
	7.50	-.390	-.392	-.724	-.947	-1.022	-.941		-.540	-.600	-1.039	-1.126	-.950	-.648
	10.00	-.364	-.360	-.601	-.897	-.943	-.917		-.512	-.537	-.956	-1.090	-.927	-.645
	15.00	-.272	-.346	-.422	-.718	-.931	-.893		-.399	-.488	-.693	-.984	-.912	-.650
	20.00	-.253	-.359	-.419	-.621	-.873	-.874		-.461	-.471	-.495	-.544	-.629	-.593
	25.00	-.315	-.336	-.399	-.528	-.772	-.844		-.409	-.433	-.504	-.762	-.841	-.657
	30.00	-.402	-.359	-.407	-.467	-.748	-.780		-.484	-.452	-.492	-.616	-.820	-.659
	35.00	-.348	-.378	-.417	-.464	-.697	-.686		-.438	-.466	-.490	-.569	-.785	-.646
	40.00	-.374	-.386	-.436	-.479	-.587	-.665		-.466	-.475	-.500	-.552	-.706	-.634
	45.00	-.389	-.389	-.444	-.492	-.551	-.567		-.466	-.475	-.505	-.540	-.674	-.612
	50.00	-.370	-.389	-.445	-.494	-.547	-.504		-.461	-.471	-.495	-.544	-.629	-.593
	55.00	-.332	-.408	-.463	-.514	-.469	-.475		-.415	-.483	-.483	-.544	-.599	-.581
	60.00	-.412	-.433	-.476	-.514	-.398	-.428		-.491	-.503	-.476	-.541	-.571	-.560
Lower surface	65.00	-.398	-.416	-.458	-.399	-.283	-.368		-.477	-.470	-.463	-.480	-.528	-.526
	70.00	-.346	-.343	-.353	-.209	-.190	-.336		-.413	-.395	-.420	-.384	-.473	-.513
	75.00	-.245	-.215	-.163	-.095	-.132	-.357		-.301	-.280	-.305	-.344	-.430	-.523
	80.00	-.126	-.107	-.065	-.040	-.093	-.315		-.184	-.180	-.176	-.283	-.391	-.499
	85.00	-.070	-.052	-.020	-.004	-.050	-.260		-.118	-.111	-.093	-.232	-.357	-.463
	90.00	-.017	-.018	.015	.024	-.015	-.260		-.058	-.069	-.045	-.179	-.322	-.472
	95.00	.026	.017	.043	.059	.012	-.239		-.009	-.023	-.007	-.147	-.287	-.459
	1.25	.516	.508	.489	.515	.545	.443		.630	.621	.590	.603	.617	.508
	2.50	.453	.403	.406	.416	.432	.369		.582	.521	.515	.521	.521	.442
	5.00	.394	.332	.322	.329	.345	.301		.510	.436	.426	.423	.433	.377
	7.50	.334	.264	.261	.252	.288	.233		.440	.363	.356	.356	.377	.308
	10.00	.284	.229	.206	.220	.233	.180		.387	.329	.309	.314	.323	.254
	15.00	.227	.188	.170	.187	.174	.081		.317	.272	.256	.258	.258	.187
	20.00	.169	.166	.125	.094	.123	-.001		.248	.243	.209	.183	.202	.073
	25.00	.140	.125	.086	.068	.078	-.077		.216	.192	.163	.148	.154	.002
	30.00	.124	.086	.063	.040	.046	-.123		.192	.154	.133	.119	.120	-.047
35.00	.084	.054	.036	.012	.009	-.134		.118	.121	.103	.085	.077	-.064	
40.00	.055	.034	.013	-.014	-.013	-.190		.113	.096	.078	.053	.051	-.123	
45.00	.055	.004	-.011	-.045	-.040	-.230		.107	.059	.050	.018	.020	-.171	
50.00	-.009	-.021	-.036	-.068	-.067	-.244		.038	.034	.018	-.006	-.016	-.196	
55.00	-.025	-.040	-.049	-.071	-.098	-.232		.019	.009	.004	-.019	-.051	-.193	
60.00	-.039	-.054	-.063	-.081	-.111	-.212		.005	-.009	-.018	-.034	-.076	-.203	
65.00	-.039	-.054	-.059	-.090	-.123	-.201		-.004	-.019	-.025	-.057	-.097	-.218	
70.00	-.032	-.045	-.059	-.084	-.100	-.160		-.004	-.019	-.035	-.057	-.085	-.193	
75.00	-.027	-.057	-.056	-.075	-.145	-.145		-.047	-.037	-.043	-.062	-.100	-.293	
80.00	-.049	-.041	-.043	-.050	-.070	-.124		-.042	-.032	-.034	-.058	-.095	-.189	
85.00	-.038	-.021	-.015	-.021	-.049	-.069		-.037	-.025	-.020	-.046	-.102	-.141	
90.00	-.008	-.001	.004	.004	-.017	-.098		-.023	-.015	-.013	-.041	-.094	-.181	
95.00	.028	.018	.037	.024	.005	-.088		.007	-.004	.009	-.051	-.114	-.174	
Upper surface		M = 0.90 α = 9.87°							M = 0.90 α = 11.82°					
	0.00	.037	.026	-.174	-.324	-.481	.124		.025	-.211	-.442	-.634	-.784	-.111
	1.25	-.492	-1.377	-1.387	-1.093	-.826	-.584		-.651	-1.435	-1.171	-.907	-.790	-.279
	2.50	-.572	-1.251	-1.333	-1.065	-.832	-.592		-.752	-1.374	-1.149	-.892	-.793	-.277
	5.00	-.728	-1.076	-1.273	-1.053	-.809	-.584		-.901	-1.260	-1.143	-.895	-.757	-.373
	7.50	-.890	-.874	-1.181	-1.032	-.798	-.579		-.850	-1.147	-1.115	-.890	-.748	-.565
	10.00	-.653	-.799	-1.126	-1.002	-.811	-.579		-.808	-1.081	-1.101	-.882	-.760	-.565
	15.00	-.525	-.730	-.928	-.963	-.800	-.579		-.673	-1.014	-1.007	-.882	-.760	-.565
	20.00	-.476	-.619	-.805	-.914	-.782	-.579		-.586	-.861	-.948	-.873	-.753	-.565
	25.00	-.489	-.519	-.712	-.848	-.774	-.584		-.558	-.810	-.877	-.857	-.757	-.566
	30.00	-.551	-.492	-.670	-.781	-.765	-.592		-.599	-.828	-.834	-.839	-.751	-.570
	35.00	-.501	-.499	-.620	-.746	-.757	-.596		-.557	-.842	-.801	-.817	-.740	-.574
	40.00	-.522	-.502	-.599	-.713	-.735	-.593		-.579	-.842	-.776	-.790	-.727	-.576
	45.00	-.497	-.498	-.585	-.676	-.718	-.593		-.548	-.842	-.758	-.754	-.720	-.580
	50.00	-.497	-.481	-.575	-.650	-.692	-.591		-.548	-.834	-.733	-.734	-.711	-.582
	55.00	-.437	-.487	-.568	-.640	-.677	-.589		-.500	-.841	-.713	-.714	-.706	-.583
	60.00	-.487	-.498	-.523	-.588	-.639	-.573		-.557	-.854	-.688	-.692	-.699	-.584
	65.00	-.487	-.498	-.523	-.588	-.639	-.573		-.535	-.835	-.664	-.671	-.692	-.585
	70.00	-.465	-.465	-.497	-.545	-.609	-.568		-.520	-.815	-.617	-.649	-.677	-.588
	75.00	-.413	-.403	-.440	-.539	-.584	-.576		-.480	-.790	-.576	-.630	-.667	-.588
	80.00	-.325	-.320	-.372	-.501	-.563	-.566		-.440	-.748	-.530	-.600	-.650	-.590
	85.00	-.229	-.235	-.285	-.456	-.536	-.554		-.375	-.689	-.486	-.580	-.629	-.594
	90.00	-.141	-.163	-.225	-.416	-.508	-.559		-.280	-.604	-.432	-.546	-.607	-.594
	95.00	-.073	-.106	-.163	-.393	-.484	-.550		-.184	-.520	-.374	-.527	-.598	-.587
Lower surface	1.25	.733	.709	.660	.653	.651	.542		.815	.773	.713	.689	.668	.565
	2.50	.701	.610	.593	.585	.584	.483		.799	.690	.663	.643	.626	.518
	5.00	.624	.525	.508	.493	.495	.428		.719	.600	.576	.557	.551	.471
	7.50	.546	.454	.440	.423	.440	.360		.631	.529	.511	.493	.494	.409
	10.00	.480	.414	.394	.381	.384	.309		.559	.485	.472	.452	.441	.359
	15.00	.403	.346	.334	.320	.317	.214		.474	.414	.396	.388	.374	.264
	20.00	.327	.311	.279	.254	.263	.131		.395	.379	.345	.320	.316	.181
	25.00	.290	.259	.231	.203	.212	.066		.352	.320	.297	.276	.269	.119
	30.00	.239	.218	.196	.177	.174	.010		.314	.275	.260	.237	.228	.063
	35.00	.175	.182	.180	.138	.130	-.057		.227	.225	.221	.194	.180	.032
	40.00	.173	.152	.128	.108	.100	-.077		.225	.204	.188	.159	.150	-.034
	45.00	.165	.114	.100	.071	.067	-.127		.211	.163	.149	.120	.114	-.082
	50.00	.095	.081	.071	.038	.029	-.156		.143	.129	.117	.090	.072	-.115
	55.00	.066	.057	.046	.021	-.014	-.184		.105	.100	.091	.069	.031	-.128
	60.00	.036	.035	.021	-.003	-.041	-.183		.101	.073	.065	.040	-.001	-.151
	65.00	.035	.014	.009	-.031	-.067	-.204		.068	.049	.048	.005	-.029	-.175
	70.00	.020	.010	-.008	-.043	-.067	-.192		.042	.037	.025	-.008	-.037	-.170
	75.00	-.006	-.015	-.026	-.056	-.093	-.198		.022	.011	.005	-.030	-.063	-.181
	80.00	-.022	-.020	-.034	-.059	-.096	-.202		-.001	-.006	-.013	-.040	-.074	-.191
85.00	-.034	-.024	-.031	-.062	-.109	-.160		-.030	-.018	-.024	-.051	-.090	-.155	
90.00	-.030	-.030	-.042	-.075	-.115	-.203		-.044	-.037	-.049	-.077	-.107	-.207	
95.00	-.024	-.035	-.047	-.117	-.148	-.195		-.078	-.075	-.082	-.117	-.149	-.197	

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient at:

	0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2	
Upper surface	Percent c	M = 0.90 α = 15.46°							M = 0.90 α = 17.43°					
	0.30	0.026	-0.674	-0.929	-1.011	-0.691	-0.692	0.010	-0.816	-0.967	-0.787	-0.667	-0.601	
	1.25	-0.880	-1.177	-0.994	-0.785	-0.659	-0.560	-0.813	-0.862	-0.789	-0.757	-0.650	-0.583	
	2.50	-1.004	-1.200	-0.916	-0.730	-0.659	-0.560	-0.799	-0.867	-0.786	-0.715	-0.647	-0.584	
	5.00	-1.169	-1.180	-0.930	-0.716	-0.654	-0.558	-0.807	-0.872	-0.794	-0.696	-0.645	-0.582	
	7.50	-1.076	-1.159	-0.923	-0.710	-0.648	-0.559	-0.810	-0.875	-0.792	-0.691	-0.644	-0.583	
	10.00	-0.982	-1.120	-0.919	-0.710	-0.641	-0.559	-0.811	-0.871	-0.809	-0.691	-0.636	-0.585	
	15.00	-0.795	-1.086	-0.909	-0.717	-0.645	-0.561	-0.810	-0.870	-0.818	-0.687	-0.643	-0.586	
	20.00	-0.723	-1.028	-0.892	-0.717	-0.640	-0.561	-0.780	-0.857	-0.797	-0.681	-0.643	-0.586	
	25.00	-0.679	-0.961	-0.852	-0.717	-0.638	-0.560	-0.742	-0.838	-0.766	-0.685	-0.639	-0.585	
	30.00	-0.641	-0.874	-0.826	-0.710	-0.635	-0.560	-0.714	-0.822	-0.760	-0.681	-0.639	-0.583	
	35.00	-0.602	-0.803	-0.784	-0.704	-0.635	-0.562	-0.654	-0.806	-0.756	-0.680	-0.638	-0.580	
	40.00	-0.589	-0.724	-0.699	-0.632	-0.561	-0.490	-0.625	-0.779	-0.719	-0.640	-0.616	-0.568	
	45.00	-0.541	-0.678	-0.775	-0.692	-0.632	-0.566	-0.586	-0.753	-0.745	-0.678	-0.638	-0.586	
	50.00	-0.552	-0.634	-0.764	-0.688	-0.631	-0.567	-0.589	-0.722	-0.736	-0.677	-0.638	-0.588	
55.00	-0.567	-0.610	-0.750	-0.682	-0.628	-0.568	-0.583	-0.698	-0.729	-0.672	-0.638	-0.593		
60.00	-0.560	-0.599	-0.729	-0.671	-0.628	-0.570	-0.589	-0.684	-0.724	-0.666	-0.639	-0.596		
65.00	-0.531	-0.573	-0.709	-0.665	-0.625	-0.572	-0.573	-0.670	-0.714	-0.659	-0.638	-0.593		
70.00	-0.521	-0.565	-0.676	-0.663	-0.623	-0.574	-0.565	-0.658	-0.708	-0.658	-0.632	-0.597		
75.00	-0.488	-0.557	-0.682	-0.653	-0.622	-0.575	-0.559	-0.644	-0.697	-0.658	-0.633	-0.604		
80.00	-0.488	-0.547	-0.665	-0.648	-0.620	-0.578	-0.559	-0.638	-0.691	-0.655	-0.632	-0.604		
85.00	-0.494	-0.533	-0.654	-0.645	-0.613	-0.581	-0.560	-0.625	-0.684	-0.657	-0.624	-0.602		
90.00	-0.471	-0.512	-0.635	-0.641	-0.604	-0.582	-0.554	-0.612	-0.675	-0.653	-0.618	-0.608		
95.00	-0.371	-0.464	-0.613	-0.637	-0.612	-0.581	-0.484	-0.582	-0.663	-0.658	-0.625	-0.609		
Lower surface	1.25	0.928	0.851	0.775	0.719	0.678	0.586	0.959	0.876	0.788	0.724	0.669	0.585	
	2.50	0.964	0.799	0.751	0.712	0.684	0.562	1.014	0.844	0.779	0.737	0.701	0.572	
	5.00	0.872	0.724	0.682	0.650	0.634	0.534	0.918	0.772	0.726	0.693	0.667	0.557	
	7.50	0.769	0.660	0.625	0.598	0.588	0.488	0.825	0.709	0.673	0.646	0.629	0.511	
	10.00	0.697	0.611	0.585	0.560	0.544	0.444	0.750	0.660	0.631	0.608	0.589	0.471	
	15.00	0.605	0.543	0.513	0.488	0.478	0.354	0.650	0.560	0.565	0.540	0.516	0.400	
	20.00	0.527	0.500	0.451	0.422	0.422	0.277	0.578	0.546	0.504	0.476	0.460	0.314	
	25.00	0.471	0.435	0.402	0.378	0.373	0.211	0.522	0.487	0.456	0.431	0.414	0.250	
	30.00	0.431	0.384	0.360	0.338	0.328	0.148	0.477	0.441	0.414	0.392	0.370	0.186	
	35.00	0.336	0.343	0.319	0.294	0.280	0.119	0.388	0.393	0.370	0.343	0.323	0.155	
	40.00	0.336	0.304	0.281	0.257	0.251	0.056	0.382	0.354	0.355	0.308	0.292	0.093	
	45.00	0.312	0.269	0.246	0.217	0.210	-0.005	0.355	0.318	0.297	0.267	0.251	0.032	
	50.00	0.245	0.227	0.207	0.179	0.172	-0.033	0.288	0.273	0.257	0.226	0.212	0.001	
	55.00	0.204	0.194	0.179	0.156	0.125	-0.055	0.242	0.238	0.228	0.200	0.164	-0.025	
	60.00	0.194	0.165	0.145	0.123	0.087	-0.079	0.232	0.206	0.190	0.164	0.127	-0.051	
65.00	0.150	0.128	0.120	0.088	0.052	-0.101	0.188	0.170	0.162	0.133	0.092	-0.072		
70.00	0.111	0.096	0.064	0.042	0.012	-0.134	0.142	0.150	0.142	0.111	0.080	-0.118		
75.00	0.088	0.075	0.053	0.041	0.012	-0.127	0.118	0.108	0.100	0.078	0.044	-0.107		
80.00	0.061	0.052	0.039	0.020	-0.009	-0.144	0.086	0.084	0.077	0.057	0.020	-0.127		
85.00	0.030	0.028	0.021	-0.003	-0.037	-0.131	0.052	0.058	0.052	0.031	-0.009	-0.116		
90.00	0.007	-0.002	-0.022	-0.033	-0.061	-0.174	0.014	0.022	0.008	-0.006	-0.042	-0.166		
95.00	-0.053	-0.059	-0.068	-0.098	-0.112	-0.180	-0.018	-0.040	-0.043	-0.078	-0.098	-0.174		
Upper surface	M = 0.90 α = 19.50°							M = 0.90 α = 21.59°						
	0.30	-0.014	-0.814	-0.778	-0.771	-0.706	-0.667	-0.092	-0.830	-0.828	-0.814	-0.784	-0.750	
	1.25	-0.752	-0.755	-0.758	-0.762	-0.695	-0.653	-0.819	-0.819	-0.821	-0.807	-0.777	-0.722	
	2.50	-0.735	-0.752	-0.755	-0.746	-0.694	-0.654	-0.808	-0.824	-0.813	-0.805	-0.778	-0.721	
	5.00	-0.725	-0.752	-0.759	-0.730	-0.694	-0.654	-0.800	-0.825	-0.815	-0.795	-0.776	-0.718	
	7.50	-0.730	-0.755	-0.749	-0.730	-0.692	-0.655	-0.808	-0.827	-0.810	-0.795	-0.771	-0.720	
	10.00	-0.734	-0.755	-0.753	-0.730	-0.685	-0.655	-0.806	-0.828	-0.817	-0.795	-0.772	-0.719	
	15.00	-0.742	-0.769	-0.759	-0.728	-0.692	-0.658	-0.814	-0.833	-0.819	-0.794	-0.772	-0.720	
	20.00	-0.752	-0.769	-0.759	-0.723	-0.694	-0.658	-0.817	-0.831	-0.821	-0.789	-0.771	-0.720	
	25.00	-0.752	-0.764	-0.757	-0.726	-0.690	-0.657	-0.811	-0.833	-0.821	-0.790	-0.768	-0.720	
	30.00	-0.757	-0.768	-0.761	-0.724	-0.691	-0.653	-0.815	-0.835	-0.822	-0.789	-0.768	-0.720	
	35.00	-0.713	-0.768	-0.760	-0.724	-0.691	-0.651	-0.763	-0.831	-0.822	-0.789	-0.768	-0.721	
	40.00	-0.692	-0.765	-0.760	-0.726	-0.691	-0.661	-0.738	-0.824	-0.821	-0.791	-0.767	-0.723	
	45.00	-0.661	-0.759	-0.759	-0.726	-0.694	-0.658	-0.709	-0.820	-0.821	-0.788	-0.767	-0.725	
	50.00	-0.666	-0.749	-0.755	-0.725	-0.695	-0.661	-0.709	-0.811	-0.821	-0.788	-0.767	-0.726	
55.00	-0.647	-0.740	-0.754	-0.723	-0.697	-0.667	-0.689	-0.801	-0.817	-0.786	-0.766	-0.728		
60.00	-0.662	-0.738	-0.754	-0.718	-0.690	-0.667	-0.718	-0.801	-0.815	-0.776	-0.765	-0.728		
65.00	-0.671	-0.731	-0.748	-0.719	-0.691	-0.667	-0.705	-0.787	-0.813	-0.777	-0.765	-0.729		
70.00	-0.635	-0.718	-0.746	-0.714	-0.694	-0.669	-0.693	-0.780	-0.810	-0.779	-0.761	-0.729		
75.00	-0.621	-0.709	-0.739	-0.714	-0.694	-0.678	-0.676	-0.767	-0.805	-0.776	-0.762	-0.730		
80.00	-0.624	-0.703	-0.737	-0.714	-0.695	-0.677	-0.681	-0.754	-0.799	-0.776	-0.762	-0.730		
85.00	-0.622	-0.694	-0.733	-0.714	-0.688	-0.674	-0.684	-0.733	-0.793	-0.776	-0.754	-0.729		
90.00	-0.626	-0.688	-0.726	-0.709	-0.681	-0.681	-0.674	-0.713	-0.783	-0.773	-0.745	-0.729		
95.00	-0.553	-0.651	-0.719	-0.713	-0.689	-0.683	-0.562	-0.670	-0.770	-0.771	-0.757	-0.726		
Lower surface	1.25	0.971	0.898	0.793	0.712	0.642	0.567	0.948	0.891	0.783	0.695	0.608	0.546	
	2.50	1.048	0.885	0.807	0.741	0.698	0.570	1.050	0.908	0.816	0.743	0.692	0.560	
	5.00	0.968	0.800	0.768	0.714	0.684	0.567	0.990	0.860	0.793	0.733	0.698	0.570	
	7.50	0.806	0.769	0.719	0.677	0.652	0.533	0.908	0.803	0.754	0.704	0.677	0.547	
	10.00	0.725	0.647	0.649	0.619	0.603	0.485	0.840	0.767	0.719	0.676	0.656	0.514	
	15.00	0.714	0.653	0.616	0.584	0.553	0.422	0.749	0.691	0.659	0.622	0.588	0.449	
	20.00	0.638	0.589	0.557	0.523	0.506	0.353	0.678	0.629	0.605	0.563	0.541	0.381	
	25.00	0.581	0.549	0.510	0.476	0.459	0.288	0.622	0.587	0.556	0.518	0.497	0.321	
	30.00	0.538	0.502	0.466	0.438	0.416	0.225	0.576	0.542	0.508	0.474	0.452	0.258	
	35.00	0.488	0.452	0.421	0.388	0.368	0.199	0.489	0.454	0.420	0.386	0.364	0.195	
	40.00	0.413	0.385	0.351	0.337	0.333	0.133	0.480	0.452	0.420	0.387	0.372	0.163	
	45.00	0.414	0.374	0.343	0.310	0.296	0.069	0.448	0.413	0.389	0.350	0.334	0.100	
	50.00	0.347	0.332	0.306	0.270	0.257	0.036	0.381	0.365	0.346	0.312	0.293	0.065	
	55.00	0.304	0.293	0.274	0.246	0.210	0.007	0.339	0.330	0.316	0.286	0.245	0.037	
	60.00	0.291	0.260	0.236	0.209	0.169	-0.021	0.325	0.297	0.277	0.247	0.203	0.003	
65.00	0.237	0.224	0.205	0.171	0.132	-0.043	0.311	0.254	0.242	0.210	0.166	-0.022		
70.00	0.172	0.201	0.148	0.117	0.088	-0.068	0.220	0.227	0.215	0.184	0.149	-0.048		
75.00	0.167	0.160	0.143	0.111	0.090	-0.088	0.188	0.184	0.177	0.149	0.111	-0.069		
80.00	0.132	0.131	0.116	0.088	0.052	-0.112	0.156	0.156	0.143	0.117	0.079	-0.098		
85.00	0.092	0.096	0.087	0.055	0.021	-0.103	0.105	0.121	0.112	0.086	0.040	-0.091		
90.00	0.043	0.059	0.039	0.022	-0.016	-0.159	0.058	0.074	0.063	0.043	0.001	-0.154		
95.00	-0.005	-0.013	-0.020	-0.055	-0.079	-0.167	-0.012	0.002	-0.004	-0.045	-0.065	-0.167		

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
 RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

		Pressure coefficient at:													
		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2	
	Percent c	M = 0.90 α = 23.68°							M = 0.90 α = 25.78°						
Upper surface	0.00	-.246	-.998	-.991	-.973	-.947	-.898		-.310	-1.093	-1.092	-1.062	-1.033	-.956	
	1.25	-.983	-.991	-.986	-.970	-.934	-.859		-1.082	-1.093	-1.086	-1.061	-1.021	-.922	
	2.50	-.970	-.990	-.979	-.960	-.931	-.857		-1.070	-1.086	-1.083	-1.058	-1.014	-.920	
	5.00	-.969	-.993	-.985	-.951	-.928	-.853		-1.070	-1.087	-1.089	-1.047	-1.010	-.916	
	7.50	-.971	-.992	-.974	-.951	-.923	-.854		-1.075	-1.088	-1.076	-1.047	-1.007	-.917	
	10.00	-.972	-.996	-.981	-.951	-.920	-.854		-1.079	-1.088	-1.084	-1.049	-.997	-.915	
	15.00	-.979	-1.006	-.985	-.950	-.923	-.853		-1.079	-1.101	-1.091	-1.048	-1.005	-.914	
	20.00	-.975	-1.004	-.985	-.942	-.925	-.850		-1.064	-1.098	-1.091	-1.039	-1.009	-.913	
	25.00	-.931	-.998	-.981	-.946	-.921	-.850		-.952	-1.087	-1.082	-1.044	-1.002	-.908	
	30.00	-.889	-.994	-.983	-.943	-.920	-.849		-.894	-1.085	-1.087	-1.039	-1.002	-.903	
	35.00	-.820	-.990	-.980	-.941	-.919	-.849		-.857	-1.075	-1.087	-1.037	-1.000	-.900	
	40.00	-.793	-.974	-.980	-.941	-.915	-.854		-.833	-1.047	-1.086	-1.037	-.993	-.909	
	45.00	-.773	-.948	-.977	-.938	-.915	-.853		-.787	-.990	-1.081	-1.031	-.995	-.904	
	50.00	-.738	-.918	-.973	-.937	-.913	-.853		-.740	-.923	-1.071	-1.032	-.990	-.903	
	55.00	-.714	-.888	-.970	-.932	-.910	-.856		-.715	-.853	-1.062	-1.024	-.987	-.906	
	60.00	-.732	-.856	-.964	-.918	-.909	-.856		-.695	-.803	-1.051	-1.012	-.985	-.904	
	65.00	-.709	-.804	-.958	-.918	-.905	-.852		-.663	-.724	-1.032	-1.004	-.979	-.896	
70.00	-.685	-.780	-.951	-.918	-.901	-.852		-.634	-.677	-1.007	-.998	-.969	-.893		
75.00	-.665	-.753	-.938	-.916	-.898	-.855		-.598	-.628	-.966	-1.000	-.965	-.897		
80.00	-.656	-.735	-.920	-.914	-.896	-.851		-.574	-.578	-.926	-.992	-.959	-.892		
85.00	-.652	-.694	-.901	-.914	-.884	-.848		-.545	-.511	-.876	-.982	-.945	-.880		
90.00	-.611	-.649	-.866	-.908	-.876	-.846		-.468	-.455	-.817	-.968	-.931	-.883		
95.00	-.465	-.551	-.786	-.900	-.890	-.842		-.357	-.375	-.681	-.943	-.940	-.878		
Lower surface	1.25	.913	.893	.774	.669	.569	.516		.871	.890	.762	.641	.534	.489	
	2.50	1.045	.928	.830	.740	.684	.544		1.034	.942	.831	.731	.671	.531	
	5.00	1.012	.899	.823	.760	.712	.568		1.026	.927	.842	.771	.721	.567	
	7.50	.948	.851	.793	.738	.730	.558		.971	.890	.822	.759	.718	.566	
	10.00	.881	.812	.763	.713	.677	.531		.913	.855	.799	.741	.702	.548	
	15.00	.792	.748	.703	.661	.622	.471		.831	.791	.743	.695	.654	.495	
	20.00	.723	.686	.651	.609	.577	.411		.767	.736	.693	.646	.614	.438	
	25.00	.669	.640	.604	.567	.537	.352		.714	.686	.646	.603	.576	.385	
	30.00	.622	.591	.560	.528	.494	.293		.669	.638	.605	.567	.534	.327	
	35.00	.545	.542	.515	.480	.447	.255		.592	.595	.563	.523	.491	.288	
	40.00	.529	.506	.476	.439	.417	.196		.574	.556	.527	.486	.459	.231	
	45.00	.495	.456	.436	.401	.377	.130		.543	.511	.486	.441	.419	.168	
	50.00	.436	.416	.395	.359	.337	.095		.478	.467	.444	.402	.381	.135	
	55.00	.388	.382	.364	.331	.287	.062		.433	.431	.408	.375	.332	.099	
	60.00	.370	.338	.321	.292	.246	.032		.412	.389	.368	.336	.288	.069	
	65.00	.308	.299	.290	.252	.206	.000		.361	.347	.334	.294	.250	.035	
	70.00	.258	.273	.251	.224	.188	-.032		.300	.320	.303	.265	.228	.004	
75.00	.231	.226	.218	.191	.146	-.055		.274	.270	.260	.225	.185	-.027		
80.00	.193	.193	.181	.157	.109	-.082		.233	.238	.225	.191	.147	-.057		
85.00	.138	.155	.148	.122	.070	-.082		.180	.200	.190	.151	.105	-.057		
90.00	.085	.110	.096	.072	.025	-.148		.123	.150	.133	.100	.054	-.128		
95.00	.001	.036	.026	-.018	-.049	-.168		.039	.079	.056	.002	-.024	-.150		

TABLE I - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
 RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

		Pressure coefficient at:												
		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2
Percent c	c	M = 0.94 α = -2.02°						M = 0.94 α = 0°						
		0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12
Upper surface	0.00	.041	.701	.645	.609	.549	.456	.056	.730	.678	.685	.648	.685	.685
	1.25	.323	.238	.257	.271	.256	.290	.217	.038	.021	-.024	-.058	.060	.060
	2.50	.266	.146	.162	.170	.174	.165	.152	-.013	-.029	-.065	-.093	-.118	-.118
	5.00	.201	.125	.108	.101	.093	.115	.088	-.016	-.027	-.074	-.115	-.120	-.120
	7.50	.167	.089	.076	.059	.046	.068	.060	-.016	-.046	-.091	-.133	-.145	-.145
	10.00	.132	.061	.040	.032	.015	.023	.033	-.025	-.067	-.111	-.142	-.161	-.161
	15.00	.090	.030	.002	.010	-.024	-.060	.013	-.049	-.086	-.109	-.156	-.197	-.197
	20.00	.040	-.003	-.026	-.023	-.051	-.136	-.004	-.077	-.115	-.133	-.166	-.233	-.233
	25.00	.014	-.022	-.046	-.065	-.088	-.239	-.053	-.089	-.128	-.154	-.189	-.298	-.298
	30.00	-.041	-.038	-.060	-.089	-.101	-.268	-.131	-.106	-.136	-.171	-.199	-.298	-.298
	35.00	-.046	-.066	-.084	-.110	-.134	-.285	-.104	-.133	-.144	-.189	-.222	-.294	-.294
	40.00	-.069	-.076	-.108	-.137	-.155	-.353	-.122	-.133	-.172	-.208	-.241	-.340	-.340
	45.00	-.083	-.093	-.134	-.163	-.188	-.346	-.142	-.147	-.187	-.229	-.265	-.334	-.334
	50.00	-.073	-.115	-.162	-.186	-.219	-.366	-.124	-.161	-.214	-.250	-.293	-.358	-.358
	55.00	-.092	-.152	-.190	-.217	-.252	-.368	-.124	-.198	-.240	-.274	-.315	-.368	-.368
	60.00	-.158	-.173	-.193	-.226	-.278	-.348	-.206	-.228	-.259	-.296	-.339	-.353	-.353
Lower surface	1.25	.063	-.248	-.401	-.727	-.874	-.936	.203	.066	.006	-.037	-.038	-.101	-.101
	2.50	.003	-.195	-.263	-.551	-.742	-.875	.138	.005	-.026	-.056	-.068	-.100	-.100
	5.00	-.024	-.131	-.206	-.261	-.421	-.794	.101	.019	-.026	-.057	-.085	-.114	-.114
	7.50	-.045	-.138	-.213	-.265	-.297	-.717	.071	-.010	-.048	-.084	-.103	-.136	-.136
	10.00	-.083	-.143	-.204	-.281	-.322	-.600	.031	-.027	-.054	-.099	-.120	-.146	-.146
	15.00	-.096	-.146	-.201	-.265	-.315	-.415	.005	-.040	-.075	-.111	-.139	-.178	-.178
	20.00	-.123	-.145	-.202	-.284	-.332	-.406	-.028	-.060	-.102	-.137	-.163	-.240	-.240
	25.00	-.144	-.149	-.199	-.265	-.314	-.394	-.049	-.049	-.103	-.146	-.174	-.280	-.280
	30.00	-.125	-.167	-.217	-.273	-.317	-.335	-.035	-.079	-.119	-.157	-.183	-.293	-.293
	35.00	-.148	-.202	-.239	-.291	-.329	-.311	-.067	-.109	-.137	-.183	-.213	-.245	-.245
	40.00	-.198	-.202	-.239	-.292	-.329	-.346	-.104	-.101	-.158	-.200	-.227	-.308	-.308
	45.00	-.169	-.208	-.255	-.317	-.345	-.373	-.083	-.132	-.187	-.232	-.252	-.337	-.337
	50.00	-.219	-.246	-.286	-.343	-.376	-.394	-.146	-.170	-.214	-.258	-.281	-.359	-.359
	55.00	-.239	-.266	-.298	-.361	-.407	-.411	-.167	-.189	-.233	-.269	-.315	-.374	-.374
	60.00	-.270	-.290	-.321	-.379	-.430	-.412	-.201	-.217	-.251	-.292	-.336	-.374	-.374
	65.00	-.284	-.295	-.331	-.397	-.450	-.419	-.209	-.220	-.256	-.316	-.359	-.376	-.376
70.00	-.292	-.287	-.329	-.383	-.438	-.391	-.214	-.211	-.250	-.291	-.335	-.327	-.327	
75.00	-.339	-.320	-.335	-.385	-.411	-.328	-.257	-.238	-.247	-.291	-.336	-.232	-.232	
80.00	-.305	-.309	-.320	-.319	-.254	-.224	-.205	-.202	-.220	-.217	-.190	-.106	-.106	
85.00	-.213	-.195	-.171	-.113	-.065	-.057	-.115	-.089	-.073	-.042	-.010	.036	.036	
90.00	-.075	-.058	-.010	.027	.034	.001	-.020	-.006	.040	.067	.077	.066	.066	
95.00	.009	.009	.055	.173	.083	.058	.037	.037	.075	.097	.120	.111	.111	
Upper surface	0.00	.039	.658	.559	.569	.547	.643	.044	.542	.414	.388	.359	.398	.398
	1.25	.078	-.222	-.341	-.757	-.867	-.716	-.058	-.945	-.1079	-.158	-.176	-.123	-.123
	2.50	.078	-.229	-.291	-.764	-.859	-.916	-.052	-.910	-.054	-.042	-.199	-.143	-.143
	5.00	.078	-.191	-.223	-.310	-.423	-.844	-.247	-.401	-.757	-.961	-.1013	-.1099	-.1099
	7.50	-.089	-.151	-.218	-.300	-.370	-.768	-.239	-.286	-.315	-.901	-.953	-.1027	-.1027
	10.00	-.100	-.151	-.224	-.296	-.361	-.702	-.230	-.269	-.325	-.842	-.936	-.984	-.984
	15.00	-.085	-.155	-.225	-.280	-.353	-.503	-.175	-.248	-.321	-.390	-.885	-.966	-.966
	20.00	-.089	-.187	-.234	-.297	-.347	-.407	-.166	-.269	-.344	-.402	-.887	-.981	-.981
	25.00	-.154	-.177	-.236	-.290	-.338	-.409	-.234	-.262	-.325	-.380	-.485	-.927	-.927
	30.00	-.237	-.202	-.251	-.300	-.344	-.348	-.310	-.281	-.333	-.384	-.417	-.879	-.879
	35.00	-.196	-.232	-.264	-.312	-.361	-.336	-.267	-.303	-.346	-.392	-.426	-.803	-.803
	40.00	-.222	-.235	-.285	-.337	-.376	-.394	-.299	-.310	-.365	-.419	-.445	-.816	-.816
	45.00	-.245	-.246	-.290	-.339	-.394	-.394	-.319	-.322	-.375	-.430	-.460	-.774	-.774
	50.00	-.224	-.252	-.298	-.356	-.410	-.419	-.297	-.322	-.382	-.446	-.485	-.722	-.722
	55.00	-.203	-.280	-.320	-.371	-.427	-.428	-.269	-.346	-.400	-.463	-.508	-.605	-.605
	60.00	-.286	-.308	-.340	-.383	-.438	-.410	-.353	-.374	-.415	-.468	-.527	-.499	-.499
	65.00	-.292	-.305	-.348	-.398	-.434	-.436	-.360	-.374	-.421	-.478	-.521	-.480	-.480
	70.00	-.306	-.309	-.344	-.401	-.452	-.411	-.373	-.374	-.416	-.479	-.536	-.458	-.458
	75.00	-.301	-.321	-.353	-.395	-.424	-.348	-.366	-.386	-.424	-.475	-.536	-.439	-.439
	80.00	-.288	-.313	-.331	-.272	-.268	-.216	-.387	-.403	-.425	-.414	-.505	-.429	-.429
	85.00	-.215	-.190	-.168	-.118	-.064	-.083	-.361	-.357	-.388	-.358	-.234	-.356	-.356
	90.00	-.075	-.058	-.018	.014	.038	.006	-.184	-.173	-.148	-.091	-.043	-.190	-.190
	95.00	.015	.009	.052	.076	.081	.044	-.025	-.038	.003	.024	.030	-.077	-.077
Lower surface	1.25	.314	.262	.246	.263	.315	.231	.436	.431	.416	.438	.486	.384	.384
	2.50	.248	.166	.170	.188	.217	.167	.382	.323	.328	.342	.374	.311	.311
	5.00	.204	.133	.121	.128	.126	.114	.328	.262	.253	.252	.270	.247	.247
	7.50	.163	.090	.074	.081	.090	.055	.277	.209	.197	.198	.214	.182	.182
	10.00	.123	.061	.046	.045	.046	.016	.228	.173	.164	.154	.159	.127	.127
	15.00	.083	.035	.019	.003	.005	-.057	.183	.138	.126	.109	.104	.037	.037
	20.00	.045	.005	-.017	-.040	-.043	-.140	.134	.137	.077	.054	.064	-.047	-.047
	25.00	.024	-.008	-.027	-.061	-.077	-.221	.108	.091	.051	.023	.022	-.134	-.134
	30.00	.020	-.028	-.045	-.082	-.097	-.264	.095	.053	.025	-.005	-.003	-.178	-.178
	35.00	-.021	-.055	-.069	-.113	-.125	-.258	.037	.022	-.002	-.036	-.044	-.178	-.178
	40.00	-.045	-.067	-.092	-.138	-.148	-.319	.021	.002	-.030	-.064	-.066	-.254	-.254
	45.00	-.040	-.094	-.125	-.168	-.180	-.359	.021	-.027	-.059	-.092	-.100	-.308	-.308
	50.00	-.105	-.131	-.156	-.194	-.207	-.379	-.040	-.1058	-.1088	-.122	-.129	-.338	-.338
	55.00	-.124	-.150	-.175	-.212	-.250	-.384	-.082	-.106	-.104	-.137	-.173	-.362	-.362
	60.00	-.157	-.171	-.193	-.229	-.276	-.376	-.086	-.099	-.119	-.157	-.195	-.369	-.369
	65.00	-.157	-.177	-.195	-.244	-.300	-.382	-.097	-.109	-.136	-.179	-.224	-.392	-.392
70.00	-.168	-.166	-.188	-.238	-.294	-.376	-.108	-.126	-.154	-.204	-.254	-.424	-.424	
75.00	-.206	-.192	-.199	-.236	-.294	-.275	-.150	-.133	-.148	-.193	-.251	-.383	-.383	
80.00	-.165	-.161	-.159	-.191	-.223	-.182	-.124	-.116	-.124	-.167	-.243	-.373	-.373	
85.00	-.108	-.090	-.066	-.073	-.083	-.039	-.092	-.075	-.071	-.102	-.166	-.268	-.268	
90.00	-.036	-.037	-.006	.008	.023	.003	-.043	-.038	-.024	-.028	-.047	-.176	-.176	
95.00	.011	.002	.041	.049	.070	.058	.006	-.005	.015	.013	.016	-.052	-.052	

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
 RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

		Pressure coefficient at:												
		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2
	Percent c	M = 0.94						M = 0.94						
		$\alpha = 5.91^\circ$						$\alpha = 7.80^\circ$						
Upper surface	0.00	.052	.411	.262	.191	.114	.479	.032	.237	.073	.052	.196	.293	
	1.25	.190	.1156	.1251	.1305	.1324	.1088	.134	.1338	.1385	.1389	.1404	.1255	
	2.50	.260	.1059	.1119	.1200	.1260	.1320	.412	.1237	.1273	.1339	.1364	.1422	
	5.00	.407	.730	.1030	.1120	.1168	.1240	.568	.954	.1204	.1263	.1305	.1368	
	7.50	.384	.408	.966	.1063	.1103	.1179	.536	.669	.1130	.1210	.1244	.1320	
	10.00	.361	.383	.898	.1020	.1091	.1144	.503	.579	.1095	.1165	.1225	.1287	
	15.00	.278	.346	.440	.931	.1040	.1111	.412	.498	.961	.1091	.1181	.1254	
	20.00	.257	.347	.406	.905	.983	.1076	.378	.460	.612	.1064	.1133	.1218	
	25.00	.313	.338	.400	.672	.947	.1061	.407	.440	.543	.1027	.1097	.1200	
	30.00	.372	.349	.400	.515	.922	.1022	.455	.440	.491	.995	.1076	.1169	
	35.00	.339	.368	.411	.474	.907	.939	.431	.458	.492	.783	.1062	.1077	
	40.00	.373	.375	.428	.476	.825	.948	.463	.462	.501	.688	.1053	.1080	
	45.00	.373	.382	.440	.480	.678	.911	.437	.470	.515	.653	.1047	.1047	
	50.00	.364	.386	.452	.499	.600	.911	.445	.470	.527	.635	.1040	.1053	
	55.00	.330	.408	.462	.521	.585	.910	.415	.487	.539	.626	.999	.1052	
	60.00	.414	.432	.476	.528	.584	.895	.501	.512	.546	.616	.874	.1044	
Lower surface	65.00	.422	.434	.484	.543	.577	.908	.501	.512	.535	.626	.795	.1053	
	70.00	.428	.436	.477	.540	.588	.909	.512	.522	.548	.623	.771	.1057	
	75.00	.417	.449	.486	.538	.592	.904	.491	.532	.560	.612	.745	.1057	
	80.00	.445	.463	.485	.536	.592	.886	.520	.548	.561	.612	.711	.1057	
	85.00	.459	.454	.485	.534	.495	.767	.545	.545	.561	.612	.629	.1058	
	90.00	.343	.357	.394	.353	.236	.578	.500	.521	.546	.598	.488	.1020	
	95.00	.110	.142	.110	.098	.109	.529	.267	.332	.369	.393	.375	.950	
	1.25	.565	.566	.535	.555	.585	.474	.667	.660	.629	.627	.636	.526	
	2.50	.514	.456	.451	.464	.479	.405	.624	.556	.549	.547	.546	.467	
	5.00	.450	.377	.367	.366	.373	.342	.556	.468	.457	.445	.454	.405	
	7.50	.394	.317	.306	.305	.317	.268	.487	.403	.395	.388	.395	.330	
	10.00	.339	.278	.270	.259	.263	.212	.425	.367	.360	.336	.336	.273	
	15.00	.277	.231	.216	.203	.202	.117	.358	.303	.292	.278	.270	.179	
	20.00	.224	.213	.162	.146	.150	.032	.296	.277	.239	.218	.215	.088	
	25.00	.191	.165	.133	.110	.106	.049	.252	.226	.198	.182	.168	.019	
	30.00	.168	.127	.102	.083	.075	.103	.225	.185	.167	.145	.132	.045	
35.00	.096	.093	.073	.046	.035	.118	.145	.148	.129	.109	.091	.059		
40.00	.086	.069	.040	.015	.009	.191	.143	.121	.099	.077	.061	.144		
45.00	.086	.040	.014	.017	.029	.247	.134	.091	.072	.040	.025	.200		
50.00	.019	.007	.019	.051	.062	.279	.063	.057	.040	.011	.011	.235		
55.00	.006	.015	.040	.063	.104	.303	.034	.029	.014	.011	.051	.261		
60.00	.017	.036	.060	.089	.128	.315	.028	.009	.009	.037	.084	.279		
65.00	.033	.052	.070	.113	.163	.348	.005	.012	.023	.063	.120	.317		
70.00	.033	.052	.079	.146	.166	.348	.002	.018	.038	.072	.124	.306		
75.00	.095	.079	.096	.139	.197	.344	.053	.047	.059	.093	.152	.316		
80.00	.083	.075	.090	.130	.196	.351	.058	.054	.063	.096	.157	.327		
85.00	.075	.061	.064	.105	.183	.301	.068	.054	.060	.095	.166	.278		
90.00	.047	.042	.044	.077	.132	.335	.063	.060	.063	.093	.152	.321		
95.00	.017	.028	.018	.049	.088	.285	.069	.075	.071	.112	.157	.283		
Upper surface	0.00	.039	.064	.125	.1305	.1514	.042	.032	.136	.0596	.086	.0871	.031	
	1.25	.440	.1375	.1385	.1385	.1385	.1385	.585	.1417	.1320	.1150	.1019	.841	
	2.50	.532	.1267	.1325	.1352	.1344	.1402	.801	.1381	.1297	.1125	.1039	.828	
	5.00	.688	.1090	.1274	.1293	.1309	.1377	.943	.1328	.1320	.1127	.1033	.819	
	7.50	.650	.890	.1204	.1252	.1281	.1347	.894	.1266	.1266	.1114	.1020	.807	
	10.00	.611	.810	.1175	.1234	.1244	.1326	.844	.1213	.1256	.1109	.1046	.802	
	15.00	.513	.715	.1108	.1167	.1232	.1296	.719	.1132	.1188	.1091	.1028	.682	
	20.00	.460	.629	.791	.1100	.1204	.1280	.643	.1015	.1134	.1086	.1012	.796	
	25.00	.464	.541	.739	.1114	.1167	.1253	.598	.682	.1095	.1048	.1022	.805	
	30.00	.508	.491	.666	.1088	.1154	.1214	.618	.523	.1055	.1032	.991	.825	
	35.00	.481	.496	.604	.1043	.1144	.1123	.591	.563	.1038	.1010	.955	.834	
	40.00	.512	.496	.568	.853	.1129	.1140	.607	.576	.1013	.986	.931	.812	
	45.00	.479	.504	.572	.814	.1129	.1110	.570	.586	.983	.954	.917	.823	
	50.00	.490	.509	.577	.802	.1120	.1118	.589	.598	.946	.924	.910	.819	
	55.00	.471	.531	.594	.795	.1120	.1119	.609	.616	.893	.899	.897	.813	
	60.00	.547	.556	.602	.776	.1120	.1112	.644	.637	.827	.861	.888	.813	
	65.00	.547	.561	.606	.755	.1034	.1112	.641	.634	.747	.845	.874	.820	
	70.00	.547	.566	.606	.725	.926	.1116	.627	.640	.676	.828	.883	.810	
	75.00	.535	.577	.613	.706	.858	.1137	.609	.643	.632	.784	.850	.800	
	80.00	.560	.597	.614	.688	.789	.1132	.632	.643	.592	.759	.829	.801	
	85.00	.577	.596	.616	.675	.721	.1118	.619	.614	.570	.741	.802	.814	
	90.00	.561	.590	.603	.658	.649	.1113	.564	.555	.540	.712	.767	.804	
	95.00	.387	.489	.588	.606	.592	.1068	.386	.446	.520	.684	.764	.794	
Lower surface	1.25	.771	.745	.691	.679	.675	.568	.902	.837	.776	.734	.694	.602	
	2.50	.743	.647	.630	.617	.607	.518	.909	.769	.735	.706	.682	.568	
	5.00	.666	.558	.536	.519	.524	.463	.819	.679	.657	.631	.618	.530	
	7.50	.590	.492	.477	.459	.466	.398	.730	.621	.596	.576	.568	.477	
	10.00	.522	.454	.436	.422	.411	.342	.656	.574	.560	.536	.517	.430	
	15.00	.442	.384	.362	.354	.343	.244	.559	.509	.486	.467	.449	.338	
	20.00	.372	.352	.311	.286	.284	.158	.485	.467	.428	.403	.395	.260	
	25.00	.330	.298	.267	.246	.239	.088	.436	.407	.378	.359	.350	.192	
	30.00	.295	.254	.230	.210	.202	.025	.395	.354	.342	.323	.306	.126	
	35.00	.211	.215	.193	.167	.158	.006	.309	.318	.301	.279	.260	.094	
	40.00	.211	.188	.164	.139	.130	.074	.311	.280	.269	.241	.229	.028	
	45.00	.199	.154	.130	.103	.109	.042	.252	.244	.232	.204	.188	.032	
	50.00	.131	.117	.098	.067	.050	.174	.218	.203	.196	.166	.155	.068	
	55.00	.096	.091	.074	.047	.011	.198	.184	.177	.171	.145	.108	.090	
	60.00	.092	.063	.045	.017	.025	.222	.181	.149	.139	.117	.071	.115	
	65.00	.065	.043	.028	.010	.057	.259	.137	.120	.116	.084	.037	.139	
70.00	.040	.034	.011	.023	.064	.251	.104	.107	.095	.087	.032	.146		
75.00	.022	.007	.001	.042	.089	.267	.083	.075	.068	.042	.004	.152		
80.00	.002	.005	.020	.049	.096	.273	.058	.063	.053	.030	.012	.164		
85.00	.022	.015	.025	.057	.109	.232	.036	.043	.041	.015	.027	.136		
90.00	.035	.031	.043	.065	.109	.274	.019	.021	.010	.003	.045	.183		
95.00	.073	.063	.067	.102	.127	.246	.012	.023	.024	.059	.085	.170		

TABLE 1. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
 RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient at:															
		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2			0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2
Percent c	Upper surface	M = 0.94 α = 15.66°						M = 0.94 α = 17.76°							
		0.00	.039	-.569	-.790	-1.037	-1.104	-.640	.044	-.744	-.962	-.948	-.821	-.733	
1.25		-.819	-1.430	-1.181	-.998	-.843	-.724	-.916	-1.243	-1.007	-.875	-.799	-.723		
2.50		-.925	-1.428	-1.161	-.971	-.850	-.718	-1.015	-1.233	-1.007	-.857	-.799	-.719		
5.00		-1.049	-1.390	-1.181	-.973	-.849	-.718	-1.162	-1.219	-1.029	-.841	-.792	-.719		
7.50		-1.005	-1.347	-1.168	-.973	-.839	-.716	-1.107	-1.210	-1.011	-.839	-.787	-.719		
10.00		-.961	-1.297	-1.185	-.972	-.860	-.716	-1.051	-1.188	-1.017	-.839	-.786	-.719		
15.00		-.816	-1.230	-1.098	-.972	-.849	-.716	-.846	-1.168	-.995	-.839	-.785	-.719		
20.00		-.685	-1.176	-1.064	-.975	-.846	-.713	-.746	-1.121	-.949	-.836	-.782	-.719		
25.00		-.642	-1.025	-1.041	-.959	-.852	-.716	-.692	-1.058	-.929	-.837	-.777	-.719		
30.00		-.655	-.722	-1.002	-.950	-.836	-.720	-.656	-.973	-.931	-.832	-.775	-.718		
35.00		-.629	-.635	-.989	-.923	-.819	-.725	-.612	-.862	-.928	-.824	-.774	-.716		
40.00		-.636	-.609	-.970	-.886	-.810	-.718	-.615	-.769	-.918	-.821	-.771	-.717		
45.00		-.607	-.616	-.956	-.852	-.804	-.724	-.600	-.722	-.904	-.812	-.770	-.718		
50.00		-.619	-.624	-.938	-.835	-.803	-.722	-.638	-.688	-.887	-.804	-.767	-.719		
55.00		-.632	-.635	-.902	-.826	-.796	-.720	-.620	-.681	-.863	-.796	-.765	-.723		
60.00		-.671	-.654	-.863	-.803	-.795	-.719	-.657	-.688	-.839	-.778	-.763	-.723		
65.00		-.654	-.641	-.826	-.808	-.792	-.723	-.633	-.677	-.817	-.775	-.760	-.723		
70.00		-.627	-.635	-.791	-.807	-.791	-.724	-.598	-.672	-.808	-.774	-.757	-.723		
75.00		-.589	-.634	-.756	-.778	-.787	-.715	-.584	-.670	-.796	-.768	-.736	-.723		
80.00		-.599	-.632	-.727	-.768	-.782	-.718	-.629	-.670	-.786	-.766	-.753	-.723		
85.00		-.589	-.604	-.693	-.757	-.764	-.724	-.620	-.652	-.772	-.766	-.743	-.723		
90.00		-.545	-.560	-.659	-.742	-.744	-.717	-.605	-.639	-.757	-.760	-.734	-.723		
95.00		-.391	-.471	-.620	-.728	-.757	-.714	-.513	-.606	-.728	-.760	-.751	-.723		
1.25	Lower surface	.957	.880	.803	.748	.699	.609	.986	.907	.815	.750	.683	.612		
2.50		.989	.828	.743	.707	.588		1.038	.871	.815	.765	.723	.603		
5.00		.895	.750	.716	.655	.665	.565	.953	.807	.762	.724	.698	.590		
7.50		.793	.682	.661	.637	.618	.518	.864	.745	.715	.683	.660	.551		
10.00		.722	.632	.622	.601	.571	.472	.788	.699	.671	.645	.622	.509		
15.00		.624	.570	.549	.533	.509	.392	.691	.630	.608	.580	.560	.435		
20.00		.552	.527	.495	.469	.452	.312	.617	.580	.553	.517	.499	.365		
25.00		.464	.444	.447	.422	.406	.245	.566	.534	.500	.476	.456	.297		
30.00		.458	.422	.406	.386	.367	.187	.524	.478	.440	.438	.415	.230		
35.00		.368	.375	.365	.341	.321	.151	.436	.438	.416	.392	.368	.200		
40.00		.366	.342	.330	.306	.286	.084	.430	.397	.385	.355	.336	.135		
45.00		.345	.307	.294	.266	.251	.026	.403	.364	.338	.316	.297	.076		
50.00		.261	.221	.221	.206	.170	-.003	.340	.321	.308	.281	.260	.041		
55.00		.237	.231	.230	.206	.170	-.030	.297	.290	.278	.253	.213	.013		
60.00		.233	.202	.196	.173	.130	-.057	.292	.258	.244	.220	.178	-.013		
65.00		.186	.172	.172	.140	.094	-.080	.245	.223	.220	.184	.141	-.038		
70.00		.149	.154	.151	.120	.086	-.097	.195	.203	.195	.166	.127	-.057		
75.00		.128	.115	.120	.096	.056	-.107	.175	.163	.159	.137	.096	-.074		
80.00	.102	.102	.089	.076	.034	-.127	.147	.146	.137	.114	.072	-.092			
85.00	.066	.076	.082	.058	.012	-.097	.110	.117	.113	.091	.046	-.071			
90.00	.043	.047	.052	.035	-.008	-.153	.075	.089	.081	.058	.021	-.128			
95.00	.022	-.001	.005	-.028	-.055	-.144	.045	.029	.030	-.007	-.030	-.131			
		M = 0.94 α = 19.85°						M = 0.94 α = 21.85°							
0.00	Upper surface	.023	-.931	-1.104	-.949	-.848	-.806	-.022	-1.003	-.964	-.936	-.894	-.860		
1.25		-1.002	-1.118	-.978	-.932	-.835	-.778	-.939	-.952	-.945	-.931	-.885	-.832		
2.50		-1.019	-1.110	-.976	-.889	-.834	-.776	-.924	-.953	-.937	-.916	-.883	-.832		
5.00		-1.066	-1.109	-1.006	-.872	-.831	-.773	-.924	-.955	-.943	-.906	-.883	-.829		
7.50		-1.068	-1.107	-.997	-.868	-.827	-.774	-.929	-.956	-.931	-.905	-.878	-.829		
10.00		-1.065	-1.097	-.999	-.867	-.825	-.774	-.933	-.953	-.939	-.904	-.874	-.829		
15.00		-.960	-1.093	-.982	-.863	-.827	-.774	-.939	-.962	-.942	-.904	-.879	-.831		
20.00		-.870	-1.077	-.972	-.859	-.824	-.774	-.938	-.958	-.942	-.897	-.881	-.830		
25.00		-.788	-1.043	-.961	-.859	-.822	-.773	-.902	-.952	-.937	-.901	-.876	-.828		
30.00		-.734	-1.005	-.957	-.853	-.818	-.771	-.880	-.949	-.937	-.897	-.876	-.825		
35.00		-.673	-.968	-.952	-.849	-.817	-.770	-.784	-.944	-.937	-.894	-.874	-.824		
40.00		-.661	-.914	-.945	-.847	-.814	-.772	-.780	-.932	-.937	-.896	-.873	-.829		
45.00		-.631	-.868	-.935	-.840	-.815	-.773	-.754	-.925	-.933	-.894	-.873	-.827		
50.00		-.649	-.822	-.920	-.838	-.813	-.773	-.735	-.912	-.929	-.892	-.872	-.829		
55.00		-.642	-.796	-.903	-.831	-.809	-.774	-.711	-.896	-.928	-.888	-.870	-.831		
60.00		-.707	-.779	-.886	-.818	-.810	-.775	-.794	-.891	-.920	-.875	-.868	-.831		
65.00		-.691	-.753	-.873	-.817	-.807	-.770	-.778	-.872	-.917	-.875	-.867	-.826		
70.00		-.657	-.740	-.859	-.815	-.803	-.773	-.733	-.858	-.912	-.875	-.861	-.828		
75.00	-.638	-.731	-.851	-.812	-.803	-.774	-.733	-.840	-.904	-.874	-.860	-.832			
80.00	-.674	-.730	-.842	-.810	-.802	-.774	-.783	-.834	-.899	-.875	-.859	-.829			
85.00	-.681	-.713	-.834	-.810	-.790	-.770	-.774	-.810	-.890	-.875	-.848	-.825			
90.00	-.673	-.704	-.821	-.806	-.782	-.773	-.756	-.800	-.877	-.872	-.838	-.827			
95.00	-.583	-.681	-.795	-.806	-.799	-.770	-.660	-.768	-.862	-.871	-.855	-.827			
1.25	Lower surface	.991	.921	.817	.740	.663	.591	.965	.922	.813	.719	.631	.570		
2.50		1.073	.914	.835	.773	.724	.599	1.073	.938	.848	.773	.721	.586		
5.00		.995	.860	.799	.750	.715	.599	1.017	.892	.828	.770	.731	.601		
7.50		.902	.802	.756	.715	.686	.569	.941	.841	.789	.741	.759	.579		
10.00		.836	.758	.715	.681	.649	.533	.872	.804	.753	.712	.699	.550		
15.00		.743	.686	.653	.626	.591	.483	.781	.733	.697	.658	.628	.486		
20.00		.667	.624	.598	.565	.546	.398	.710	.670	.641	.605	.580	.423		
25.00		.620	.587	.549	.523	.499	.334	.661	.627	.597	.561	.537	.364		
30.00		.574	.536	.507	.483	.457	.271	.614	.580	.551	.523	.494	.301		
35.00		.489	.493	.466	.434	.410	.235	.532	.534	.509	.477	.451	.265		
40.00		.479	.454	.429	.398	.380	.177	.523	.496	.469	.436	.418	.207		
45.00		.453	.414	.390	.362	.341	.113	.494	.455	.429	.401	.381	.144		
50.00		.489	.375	.352	.325	.303	.080	.427	.411	.393	.362	.342	.112		
55.00		.346	.336	.323	.299	.256	.050	.384	.378	.363	.334	.293	.080		
60.00		.331	.305	.285	.262	.217	.023	.367	.342	.324	.296	.254	.048		
65.00		.284	.269	.258	.225	.181	-.004	.321	.302	.295	.259	.217	.022		
70.00		.236	.247	.230	.201	.167	-.028	.267	.278	.265	.235	.204	-.006		
75.00		.212	.208	.199	.176	.132	-.047	.241	.239	.230	.203	.165	-.017		
80.00	.178	.183	.169	.147	.103	-.069	.205	.209	.195	.171	.134	-.053			
85.00	.137	.151	.146	.119	.073	-.059	.158	.172	.169	.142	.099	-.046			
90.00	.099	.114	.105	.088	.041	-.114	.113	.133	.123	.102	.063	-.107			
95.00	.047	.051	.048	.011	-.016	-.118	.050	.061	.063	.023	-.001	-.116			

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
 RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

		Pressure coefficient at:													
		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2	
Percent c		M = 0.94 α = 23.90°							M = 0.94 α = 25.95°						
Upper surface	0.00	-.090	-1.009	-.986	-.964	-.946	-.906		-.312	-1.140	-1.120	-1.100	-1.061	-1.002	
	1.25	-.986	-.994	-.982	-.961	-.939	-.887		-1.104	-1.123	-1.110	-1.089	-1.050	-.973	
	2.50	-.976	-.995	-.973	-.957	-.938	-.883		-1.092	-1.116	-1.102	-1.078	-1.044	-.971	
	5.00	-.973	-.996	-.979	-.953	-.936	-.880		-1.091	-1.122	-1.115	-1.070	-1.043	-.967	
	7.50	-.978	-.999	-.969	-.952	-.930	-.881		-1.101	-1.119	-1.095	-1.070	-1.037	-.967	
	10.00	-.982	-1.001	-.979	-.952	-.931	-.883		-1.109	-1.116	-1.103	-1.073	-1.031	-.966	
	15.00	-.980	-1.006	-.981	-.950	-.932	-.881		-1.094	-1.126	-1.108	-1.068	-1.037	-.966	
	20.00	-.982	-.999	-.981	-.945	-.931	-.881		-1.017	-1.126	-1.110	-1.056	-1.041	-.966	
	25.00	-.926	-.997	-.981	-.947	-.929	-.879		-.869	-1.111	-1.101	-1.065	-1.034	-.960	
	30.00	-.892	-.995	-.980	-.945	-.928	-.879		-.843	-1.098	-1.105	-1.056	-1.033	-.955	
	35.00	-.817	-.990	-.980	-.943	-.928	-.879		-.846	-1.091	-1.104	-1.055	-1.031	-.950	
	40.00	-.817	-.976	-.978	-.943	-.925	-.882		-.824	-1.046	-1.105	-1.054	-1.026	-.960	
	45.00	-.786	-.965	-.977	-.941	-.925	-.882		-.797	-.997	-1.097	-1.050	-1.027	-.955	
	50.00	-.779	-.946	-.974	-.940	-.924	-.883		-.768	-.928	-1.087	-1.048	-1.023	-.955	
	55.00	-.744	-.929	-.971	-.938	-.921	-.885		-.745	-.875	-1.081	-1.044	-1.020	-.957	
60.00	-.819	-.921	-.969	-.920	-.921	-.885		-.741	-.848	-1.070	-1.027	-1.019	-.956		
65.00	-.826	-.897	-.964	-.924	-.918	-.882		-.720	-.798	-1.056	-1.024	-1.012	-.945		
70.00	-.780	-.882	-.960	-.927	-.915	-.883		-.688	-.757	-1.043	-1.020	-1.003	-.946		
75.00	-.777	-.872	-.956	-.923	-.915	-.885		-.669	-.724	-1.015	-1.023	-.999	-.952		
80.00	-.822	-.870	-.948	-.923	-.913	-.883		-.644	-.704	-.993	-1.018	-.996	-.946		
85.00	-.818	-.848	-.938	-.924	-.900	-.879		-.654	-.683	-.963	-1.010	-.978	-.935		
90.00	-.805	-.836	-.924	-.922	-.892	-.880		-.644	-.673	-.930	-.991	-.962	-.938		
95.00	-.695	-.812	-.895	-.918	-.910	-.878		-.524	-.623	-.877	-.985	-.971	-.938		
Lower surface	1.25	.934	.926	.806	.700	.603	.554		.913	.925	.794	.680	.571	.528	
	2.50	1.070	.960	.856	.774	.716	.581		1.071	.978	.867	.766	.706	.566	
	5.00	1.073	.930	.857	.789	.744	.606		1.061	.960	.874	.802	.756	.604	
	7.50	.971	.888	.825	.771	.776	.598		1.005	.924	.858	.794	.752	.606	
	10.00	.914	.847	.794	.750	.712	.575		.950	.890	.831	.777	.734	.588	
	15.00	.823	.784	.740	.696	.659	.516		.863	.828	.780	.735	.690	.540	
	20.00	.753	.727	.682	.646	.617	.459		.803	.775	.730	.686	.651	.486	
	25.00	.706	.678	.641	.604	.578	.405		.758	.729	.691	.646	.613	.434	
	30.00	.663	.630	.597	.569	.538	.345		.711	.682	.646	.607	.574	.376	
	35.00	.581	.584	.558	.524	.492	.308		.635	.635	.605	.566	.531	.342	
	40.00	.566	.543	.518	.480	.461	.247		.618	.596	.568	.527	.501	.286	
	45.00	.536	.502	.476	.444	.424	.185		.590	.561	.528	.488	.454	.224	
	50.00	.473	.458	.439	.409	.387	.153		.527	.513	.491	.451	.425	.187	
	55.00	.432	.422	.409	.377	.338	.120		.484	.475	.456	.421	.378	.154	
	60.00	.413	.385	.367	.339	.297	.090		.465	.437	.421	.383	.335	.122	
65.00	.362	.347	.337	.299	.260	.058		.413	.392	.386	.345	.298	.094		
70.00	.307	.317	.299	.276	.241	.028		.356	.371	.352	.317	.280	.081		
75.00	.276	.273	.284	.242	.202	.003		.329	.324	.310	.282	.236	.031		
80.00	.240	.246	.236	.209	.167	-.024		.288	.295	.278	.247	.202	.003		
85.00	.191	.210	.202	.177	.132	-.020		.238	.254	.242	.211	.161	.002		
90.00	.137	.164	.152	.132	.088	-.083		.182	.204	.187	.164	.114	-.063		
95.00	.054	.087	.086	.046	.021	-.100		.080	.122	.119	.072	.041	-.086		

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
 RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

		Pressure coefficient at:												
		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2
	Percent c	M = 0.98 α = -2.00°							M = 0.98 α = -0.08°					
Upper surface	0.00	.029	.718	.668	.630	.570	.485		.061	.761	.714	.711	.673	.708
	1.25	.345	.259	.273	.286	.271	.307		.268	.107	.088	.062	.024	.120
	2.50	.288	.179	.175	.186	.191	.181		.205	.060	.038	.009	-.011	-.055
	5.00	.226	.149	.130	.116	.113	.140		.147	.052	.035	-.004	-.041	-.067
	7.50	.205	.115	.095	.079	.063	.089		.119	.047	.015	-.025	-.070	-.084
	10.00	.159	.089	.063	.056	.035	.046		.091	.033	-.006	-.045	-.069	-.101
	15.00	.115	.052	.022	.026	-.003	-.029		.065	.006	-.032	-.057	-.092	-.130
	20.00	.052	.017	-.015	-.013	-.023	-.102		.036	-.024	-.061	-.084	-.115	-.165
	25.00	.037	-.003	-.024	-.048	-.064	-.205		-.005	-.035	-.068	-.111	-.131	-.242
	30.00	-.005	-.021	-.041	-.063	-.084	-.240		-.072	-.057	-.089	-.119	-.139	-.242
	35.00	-.030	-.046	-.064	-.082	-.112	-.259		-.060	-.084	-.108	-.124	-.164	-.240
	40.00	-.052	-.051	-.089	-.120	-.134	-.327		-.086	-.101	-.121	-.153	-.184	-.292
	45.00	-.061	-.069	-.113	-.143	-.164	-.322		-.103	-.103	-.132	-.169	-.207	-.281
	50.00	-.049	-.092	-.143	-.169	-.194	-.350		-.078	-.106	-.153	-.194	-.231	-.304
	55.00	-.072	-.132	-.176	-.199	-.225	-.354		-.083	-.141	-.184	-.218	-.259	-.316
60.00	-.143	-.163	-.186	-.216	-.256	-.338		-.158	-.176	-.205	-.239	-.275	-.303	
65.00	-.147	-.159	-.187	-.227	-.263	-.364		-.161	-.176	-.209	-.250	-.280	-.330	
70.00	-.160	-.170	-.198	-.229	-.292	-.366		-.178	-.183	-.216	-.258	-.306	-.334	
75.00	-.166	-.181	-.211	-.232	-.307	-.357		-.183	-.193	-.223	-.259	-.321	-.325	
80.00	-.186	-.200	-.211	-.241	-.315	-.346		-.198	-.214	-.226	-.254	-.323	-.315	
85.00	-.209	-.190	-.211	-.245	-.307	-.321		-.225	-.208	-.226	-.253	-.304	-.295	
90.00	-.177	-.182	-.196	-.240	-.283	-.301		-.195	-.203	-.217	-.253	-.275	-.277	
95.00	-.147	-.178	-.195	-.230	-.277	-.309		-.145	-.168	-.204	-.239	-.272	-.285	
Lower surface	1.25	.091	-.206	-.377	-.682	-.859	-.915		.235	.090	.019	-.033	-.078	-.138
	2.50	.029	-.167	-.225	-.255	-.732	-.844		.171	.042	-.002	-.056	-.105	-.122
	5.00	.006	-.094	-.179	-.241	-.434	-.766		.137	.055	.005	-.034	-.073	-.127
	7.50	-.016	-.108	-.184	-.253	-.268	-.693		.104	.026	-.019	-.060	-.077	-.136
	10.00	-.054	-.116	-.183	-.262	-.294	-.601		.070	.008	-.040	-.075	-.089	-.132
	15.00	-.070	-.120	-.181	-.243	-.289	-.397		.041	-.005	-.042	-.085	-.101	-.146
	20.00	-.099	-.120	-.187	-.263	-.309	-.377		.001	-.019	-.067	-.116	-.126	-.193
	25.00	-.124	-.130	-.178	-.242	-.288	-.377		-.017	-.019	-.075	-.111	-.134	-.231
	30.00	-.107	-.142	-.190	-.250	-.293	-.316		-.006	-.045	-.089	-.115	-.142	-.244
	35.00	-.126	-.179	-.217	-.277	-.313	-.291		-.036	-.085	-.096	-.139	-.169	-.218
	40.00	-.182	-.186	-.226	-.288	-.320	-.329		-.082	-.086	-.100	-.157	-.179	-.259
	45.00	-.151	-.190	-.236	-.300	-.341	-.361		-.051	-.095	-.133	-.194	-.207	-.289
	50.00	-.200	-.224	-.268	-.326	-.360	-.385		-.112	-.129	-.167	-.223	-.235	-.311
	55.00	-.220	-.245	-.284	-.339	-.381	-.401		-.131	-.152	-.180	-.233	-.271	-.329
	60.00	-.253	-.272	-.303	-.360	-.399	-.407		-.166	-.182	-.208	-.253	-.291	-.334
65.00	-.268	-.279	-.316	-.377	-.422	-.411		-.175	-.192	-.217	-.275	-.308	-.340	
70.00	-.275	-.267	-.314	-.365	-.414	-.405		-.183	-.180	-.217	-.265	-.307	-.340	
75.00	-.324	-.302	-.321	-.375	-.426	-.390		-.238	-.213	-.223	-.270	-.328	-.325	
80.00	-.328	-.323	-.330	-.382	-.440	-.394		-.240	-.233	-.244	-.280	-.328	-.334	
85.00	-.342	-.326	-.331	-.369	-.398	-.337		-.255	-.234	-.244	-.271	-.332	-.277	
90.00	-.319	-.321	-.331	-.354	-.382	-.376		-.234	-.239	-.244	-.269	-.317	-.312	
95.00	-.225	-.274	-.293	-.313	-.334	-.343		-.170	-.211	-.232	-.277	-.289	-.273	
Upper surface	0.00	.064	.713	.606	.616	.600	.680		.069	.610	.488	.465	.438	.643
	1.25	.150	-.133	-.260	-.614	-.701	-.584		.021	-.779	-.887	-.952	-.982	-.782
	2.50	.087	-.145	-.224	-.372	-.612	-.764		-.041	-.386	-.795	-.861	-.904	-.998
	5.00	.010	-.107	-.170	-.246	-.342	-.699		-.162	-.303	-.641	-.772	-.830	-.942
	7.50	-.009	-.077	-.160	-.248	-.284	-.637		-.158	-.206	-.226	-.733	-.794	-.885
	10.00	-.037	-.081	-.165	-.245	-.275	-.589		-.153	-.186	-.240	-.694	-.754	-.848
	15.00	-.022	-.086	-.175	-.220	-.279	-.430		-.110	-.181	-.246	-.302	-.738	-.830
	20.00	-.024	-.119	-.185	-.240	-.285	-.333		-.099	-.201	-.271	-.307	-.688	-.808
	25.00	-.086	-.115	-.187	-.237	-.274	-.347		-.168	-.195	-.255	-.307	-.427	-.792
	30.00	-.165	-.139	-.199	-.247	-.280	-.292		-.246	-.211	-.262	-.311	-.341	-.740
	35.00	-.133	-.166	-.218	-.263	-.297	-.275		-.207	-.238	-.276	-.319	-.353	-.666
	40.00	-.163	-.174	-.235	-.290	-.313	-.328		-.233	-.248	-.297	-.346	-.369	-.700
	45.00	-.181	-.188	-.250	-.298	-.331	-.329		-.258	-.261	-.308	-.359	-.390	-.656
	50.00	-.160	-.187	-.256	-.318	-.352	-.354		-.237	-.261	-.316	-.374	-.414	-.646
	55.00	-.143	-.214	-.278	-.331	-.372	-.368		-.209	-.282	-.334	-.386	-.438	-.580
60.00	-.224	-.248	-.297	-.339	-.385	-.353		-.294	-.312	-.347	-.399	-.455	-.465	
65.00	-.230	-.248	-.300	-.350	-.374	-.381		-.302	-.314	-.347	-.406	-.451	-.419	
70.00	-.245	-.250	-.303	-.352	-.389	-.388		-.311	-.315	-.353	-.407	-.462	-.388	
75.00	-.245	-.264	-.312	-.355	-.391	-.383		-.311	-.324	-.359	-.407	-.465	-.384	
80.00	-.269	-.282	-.316	-.350	-.371	-.368		-.336	-.342	-.361	-.404	-.463	-.381	
85.00	-.295	-.282	-.316	-.350	-.348	-.349		-.359	-.342	-.361	-.404	-.463	-.383	
90.00	-.266	-.280	-.305	-.338	-.317	-.330		-.335	-.342	-.350	-.393	-.362	-.384	
95.00	-.181	-.249	-.287	-.290	-.300	-.335		-.237	-.312	-.341	-.363	-.338	-.401	
Lower surface	1.25	.351	.306	.267	.284	.337	.261		.469	.459	.445	.463	.504	.411
	2.50	.297	.218	.202	.213	.241	.204		.416	.357	.359	.375	.393	.341
	5.00	.253	.184	.149	.150	.163	.153		.364	.298	.295	.289	.300	.280
	7.50	.217	.139	.104	.113	.126	.102		.314	.246	.238	.234	.247	.215
	10.00	.176	.112	.074	.087	.088	.066		.269	.210	.202	.194	.196	.168
	15.00	.136	.086	.045	.036	.036	.016		.221	.176	.170	.153	.141	.085
	20.00	.098	.055	.017	-.010	-.001	-.080		.174	.176	.128	.093	.104	.002
	25.00	.076	.044	.009	-.028	-.027	-.154		.150	.131	.095	.065	.064	-.081
	30.00	.067	.021	-.011	-.045	-.051	-.201		.133	.094	.070	.043	.035	-.131
	35.00	.025	-.005	-.040	-.078	-.079	-.196		.075	.063	.041	.010	-.001	-.158
	40.00	.004	-.020	-.058	-.100	-.098	-.208		.040	.015	-.018	.029	-.201	-.157
	45.00	-.010	-.040	-.091	-.136	-.131	-.300		.063	.011	-.019	-.053	-.055	-.258
	50.00	-.052	-.076	-.122	-.165	-.159	-.321		-.005	-.019	-.044	-.081	-.090	-.286
	55.00	-.074	-.098	-.142	-.179	-.195	-.334		-.025	-.047	-.066	-.093	-.129	-.312
	60.00	-.108	-.124	-.166	-.199	-.224	-.327		-.052	-.068	-.085	-.117	-.155	-.325
65.00	-.115	-.137	-.172	-.221	-.252	-.335		-.060	-.080	-.094	-.135	-.183	-.340	
70.00	-.117	-.126	-.175	-.210	-.253	-.329		-.066	-.079	-.099	-.136	-.187	-.343	
75.00	-.129	-.162	-.191	-.228	-.277	-.321		-.130	-.116	-.127	-.157	-.214	-.343	
80.00	-.179	-.178	-.207	-.240	-.293	-.327		-.135	-.127	-.139	-.180	-.232	-.348	
85.00	-.195	-.178	-.207	-.244	-.308	-.275		-.149	-.127	-.137	-.185	-.249	-.297	
90.00	-.172	-.181	-.207	-.247	-.300	-.314		-.132	-.132	-.141	-.185	-.249	-.345	
95.00	-.130	-.159	-.198	-.259	-.277	-.273		-.108	-.122	-.137	-.198	-.239	-.304	

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

		Pressure coefficient at:											
		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2	0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2
Upper surface	Percent												
	c												
	M = 0.98	α = 5.93°						M = 0.98 α = 7.92°					
	0.30	.071	.472	.327	.267	.208	.536	.075	.319	.162	.057	-.059	.377
	1.25	-.122	-1.010	-1.097	-1.142	-1.144	-.243	-.124	-1.171	-1.234	-1.267	-1.200	-1.100
	2.50	-.497	-.907	-.992	-1.058	-1.075	-1.158	-.520	-1.084	-1.132	-1.193	-1.223	-1.281
	5.00	-.333	-.638	-.919	-.979	-1.010	-1.105	-.473	-.813	-1.063	-1.118	-1.154	-1.227
	7.50	-.316	-.331	-.848	-.931	-.962	-1.034	-.445	-.547	-.993	-1.070	-1.101	-1.169
	10.00	-.298	-.312	-.795	-.902	-.936	-1.008	-.416	-.463	-.964	-1.036	-1.081	-1.139
	15.00	-.216	-.286	-.383	-.621	-.908	-.978	-.325	-.405	-.877	-.928	-1.003	-1.100
	20.00	-.137	-.207	-.248	-.388	-.596	-.876	-.256	-.376	-.776	-.837	-.902	-1.082
	25.00	-.057	-.180	-.240	-.361	-.527	-.938	-.127	-.363	-.452	-.911	-.961	-1.062
	30.00	-.022	-.291	-.345	-.459	-.608	-.897	-.381	-.367	-.420	-.883	-.948	-1.032
	35.00	-.281	-.309	-.358	-.415	-.801	-.819	-.356	-.384	-.420	-.739	-.935	-.947
	40.00	-.317	-.324	-.375	-.415	-.774	-.839	-.384	-.393	-.435	-.613	-.929	-.954
	45.00	-.324	-.328	-.389	-.423	-.670	-.805	-.368	-.399	-.448	-.575	-.928	-.921
Lower surface	50.00	-.310	-.330	-.399	-.441	-.548	-.809	-.375	-.403	-.463	-.558	-.923	-.930
	55.00	-.280	-.350	-.411	-.461	-.523	-.808	-.345	-.419	-.474	-.547	-.917	-.930
	60.00	-.362	-.377	-.424	-.468	-.519	-.793	-.429	-.444	-.484	-.540	-.839	-.923
	65.00	-.368	-.382	-.422	-.481	-.506	-.796	-.432	-.447	-.483	-.546	-.717	-.929
	70.00	-.373	-.381	-.426	-.482	-.516	-.800	-.436	-.451	-.490	-.545	-.683	-.934
	75.00	-.364	-.390	-.433	-.482	-.521	-.807	-.416	-.458	-.497	-.542	-.663	-.937
	80.00	-.396	-.408	-.433	-.482	-.527	-.801	-.453	-.477	-.497	-.545	-.664	-.937
	85.00	-.398	-.410	-.425	-.476	-.450	-.787	-.456	-.477	-.488	-.540	-.510	-.940
	90.00	-.398	-.410	-.425	-.476	-.450	-.787	-.456	-.477	-.488	-.540	-.510	-.940
	95.00	-.313	-.384	-.422	-.455	-.403	-.773	-.373	-.454	-.488	-.524	-.414	-.950
	1.25	.583	.589	.557	.571	.600	.501	.692	.683	.642	.642	.657	.554
	2.50	.537	.482	.481	.497	.487	.452	.552	.583	.567	.568	.571	.492
	5.00	.480	.406	.389	.390	.403	.372	.586	.493	.474	.465	.475	.425
	7.50	.420	.347	.330	.326	.344	.303	.519	.431	.419	.404	.416	.365
	10.00	.367	.313	.292	.284	.289	.250	.459	.398	.382	.363	.363	.311
	15.00	.307	.265	.245	.230	.233	.160	.391	.337	.321	.307	.299	.217
20.00	.255	.245	.197	.172	.181	.047	.332	.310	.263	.243	.234	.134	
25.00	.199	.160	.129	.109	.108	-.059	.293	.260	.226	.203	.204	.059	
30.00	.126	.127	.097	.072	.070	-.070	.263	.222	.197	.173	.170	-.003	
35.00	.121	.105	.071	.043	.043	-.144	.184	.186	.164	.133	.127	-.020	
40.00	.117	.072	.039	.012	.010	-.201	.184	.158	.128	.101	.098	-.098	
45.00	.050	.039	.008	.002	-.024	-.235	.174	.124	.097	.070	.064	-.155	
50.00	.011	.011	-.039	-.065	-.260	-.307	.105	.080	.070	.038	.029	-.188	
55.00	.010	-.009	-.035	-.063	-.094	-.273	.074	.069	.049	.020	-.113	-.117	
60.00	-.007	-.024	-.047	-.084	-.126	-.301	.066	.041	.019	-.007	-.042	-.237	
65.00	-.015	-.027	-.059	-.091	-.129	-.308	.047	.023	.004	-.032	-.078	-.274	
70.00	-.079	-.062	-.087	-.125	-.166	-.310	.039	.017	-.009	-.043	-.085	-.274	
75.00	-.082	-.073	-.095	-.137	-.182	-.318	-.017	-.015	-.034	-.069	-.118	-.276	
80.00	-.076	-.076	-.099	-.137	-.182	-.318	-.024	-.024	-.078	-.130	-.167	-.285	
85.00	-.083	-.077	-.097	-.135	-.194	-.323	-.037	-.031	-.040	-.079	-.140	-.248	
90.00	-.088	-.085	-.097	-.144	-.183	-.290	-.037	-.039	-.046	-.074	-.132	-.297	
95.00	-.088	-.085	-.097	-.144	-.183	-.290	-.059	-.055	-.058	-.097	-.129	-.262	
Upper surface	M = 0.98	α = 9.31°						M = 0.98 α = 13.68°					
	0.30	.070	.147	-.027	-.195	-.372	.154	.040	-.229	-.481	-.706	-.880	-.402
	1.25	-.357	-1.255	-1.287	-1.304	-1.311	-1.194	-.584	-1.288	-1.257	-1.241	-1.278	-1.282
	2.50	-.447	-1.179	-1.210	-1.266	-1.280	-1.320	-.691	-1.254	-1.232	-1.242	-1.273	-1.319
	5.00	-.601	-.989	-.1158	-1.193	-1.224	-1.278	-.828	-1.187	-1.267	-1.239	-1.277	-1.311
	7.50	-.566	-.760	-.1088	-1.149	-1.175	-1.244	-.787	-.142	-1.201	-1.235	-1.247	-1.305
	10.00	-.531	-.679	-.1066	-1.120	-1.152	-1.217	-.745	-.078	-1.171	-1.207	-1.234	-.292
	15.00	-.420	-.592	-.1007	-.1056	-1.122	-1.183	-.634	-1.008	-1.089	-1.170	-1.220	-1.277
	20.00	-.391	-.540	-.728	-1.026	-1.092	-1.161	-.559	-.923	-1.024	-1.123	-1.193	-1.260
	25.00	-.394	-.484	-.645	-1.009	-1.053	-1.142	-.516	-.651	-.982	-1.097	-1.165	-1.245
	30.00	-.440	-.444	-.589	-.984	-1.038	-1.112	-.546	-.448	-.942	-1.061	-1.140	-1.232
	35.00	-.420	-.442	-.537	-.966	-1.026	-1.024	-.520	-.505	-.948	-1.030	-1.109	-1.188
	40.00	-.446	-.440	-.503	-.826	-.1016	-1.003	-.520	-.505	-.948	-.906	-.999	-1.101
	45.00	-.442	-.442	-.503	-.826	-.1016	-1.003	-.513	-.532	-.887	-.981	-1.082	-1.141
	50.00	-.434	-.449	-.509	-.721	-1.012	-1.013	-.540	-.543	-.861	-.969	-1.061	-1.132
	55.00	-.448	-.469	-.525	-.710	-1.011	-1.011	-.560	-.565	-.823	-.960	-1.048	-1.117
60.00	-.487	-.494	-.534	-.692	-1.008	-1.007	-.592	-.593	-.782	-.940	-1.017	-1.067	
65.00	-.490	-.499	-.534	-.676	-.980	-1.011	-.596	-.606	-.774	-.930	-.980	-1.084	
70.00	-.490	-.506	-.538	-.669	-.982	-1.011	-.588	-.608	-.755	-.931	-.920	-1.004	
75.00	-.490	-.506	-.538	-.669	-.982	-1.011	-.588	-.619	-.716	-.916	-.873	-1.045	
80.00	-.516	-.536	-.551	-.629	-.738	-1.025	-.619	-.641	-.602	-.895	-.825	-1.032	
85.00	-.526	-.537	-.554	-.613	-.658	-1.024	-.625	-.647	-.608	-.878	-.775	-1.046	
90.00	-.514	-.537	-.546	-.599	-.592	-1.031	-.619	-.644	-.604	-.757	-.723	-1.089	
95.00	-.416	-.502	-.545	-.575	-.539	-1.053	-.534	-.602	-.613	-.640	-.701	-1.074	
Lower surface	1.25	.785	.761	.712	.702	.699	.599	.929	.874	.805	.768	.726	.639
	2.50	.759	.668	.645	.637	.631	.547	.939	.808	.766	.734	.712	.605
	5.00	.686	.580	.568	.542	.547	.491	.858	.724	.689	.665	.652	.572
	7.50	.611	.514	.501	.483	.490	.428	.768	.654	.631	.611	.600	.521
	10.00	.546	.478	.459	.436	.440	.379	.684	.563	.540	.556	.547	.470
	15.00	.441	.382	.375	.352	.358	.302	.564	.438	.420	.430	.420	.354
	20.00	.402	.378	.362	.332	.320	.201	.530	.504	.462	.442	.432	.307
	25.00	.359	.324	.296	.277	.271	.129	.479	.448	.418	.399	.387	.240
	30.00	.325	.281	.265	.245	.235	.064	.441	.392	.379	.364	.346	.170
	35.00	.240	.245	.226	.205	.192	.043	.352	.356	.340	.321	.303	.086
	40.00	.232	.232	.216	.195	.182	-.042	.333	.328	.312	.298	.271	.076
	45.00	.232	.183	.160	.132	.129	-.092	.333	.251	.271	.247	.234	.007
	50.00	.162	.147	.123	.101	.094	-.125	.267	.254	.238	.214	.199	-.026
	55.00	.127	.120	.110	.080	.052	-.152	.228	.216	.214	.194	.160	-.051
	60.00	.122	.096	.080	.052	.021	-.178	.229	.197	.183	.166	.117	-.076
	65.00	.091	.074	.062	.027	-.013	-.213	.188	.164	.163	.133	.087	-.107
70.00	.075	.063	.048	.012	-.029	-.221	.150	.141	.119	.119	.081	-.107	
75.00	.064	.036	.016	-.016	-.049	-.214	.122	.112	.094	.053	.053	-.130	
80.00	.037	.026	.015	-.020	-.059	-.235	.114	.110	.100	.081	.035	-.142	
85.00	.014	.016	.014	-.020	-.070	-.188	.085	.093	.092	.071	.019	-.114	
90.00	.003	.004	.000	-.024	-.066	-.234	.062	.068	.045	.054	.008	-.150	
95.00	-.033	-.022	-.021	-.059	-.073	-.203	.047	.032	.036	.007	-.022	-.131	

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

		Pressure coefficient at:												
		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2
Upper surface	Percent c	M = 0.98 α = 15.81°						M = 0.98 α = 17.97°						
	0.30	.024	-.474	-.696	-.943	-1.065	-.716	.011	-.660	-.872	-1.078	-1.163	-.904	
	1.25	-.712	-1.346	-1.293	-1.231	-1.123	-1.011	-.839	-1.326	-1.276	-1.133	-1.031	-.914	
	2.50	-.823	-1.345	-1.263	-1.228	-1.128	-1.004	-.949	-1.306	-1.254	-1.122	-1.031	-.909	
	5.00	-.948	-1.292	-1.203	-1.220	-1.120	-1.003	-1.046	-1.300	-1.275	-1.114	-1.038	-.904	
	7.50	-.906	-1.253	-1.266	-1.224	-1.115	-.994	-1.012	-1.291	-1.245	-1.114	-1.041	-.903	
	10.00	-.866	-1.203	-1.266	-1.231	-1.123	-.994	-.979	-1.266	-1.264	-1.114	-1.049	-.902	
	15.00	-.744	-1.150	-1.207	-1.222	-1.120	-.994	-.833	-1.223	-1.251	-1.109	-1.066	-.901	
	20.00	-.632	-1.105	-1.160	-1.199	-1.110	-.994	-.691	-1.184	-1.229	-1.091	-1.075	-.897	
	30.00	-.589	-.901	-1.121	-1.189	-1.105	-.994	-.660	-1.117	-1.200	-1.087	-1.072	-.894	
	35.00	-.527	-1.085	-1.166	-1.194	-1.094	-.995	-.643	-.674	-1.188	-1.065	-1.056	-.892	
	40.00	-.580	-.559	-1.065	-1.148	-1.081	-.997	-.636	-.658	-1.177	-1.067	-1.047	-.888	
	45.00	-.593	-.579	-1.056	-1.132	-1.067	-.996	-.646	-.618	-1.167	-1.031	-1.037	-.890	
	50.00	-.571	-.591	-1.044	-1.117	-1.056	-.990	-.617	-.630	-1.156	-1.000	-1.033	-.886	
	55.00	-.595	-.606	-1.035	-1.102	-1.040	-.983	-.640	-.650	-1.144	-.979	-1.020	-.883	
	60.00	-.626	-.629	-1.007	-1.083	-1.020	-.971	-.657	-.671	-1.118	-.964	-1.006	-.881	
Lower surface	65.00	-.658	-.653	-.949	-1.045	-1.002	-.963	-.700	-.699	-1.033	-.948	-.996	-.877	
	70.00	-.683	-.601	-.979	-.963	-.940	-.927	-.710	-.701	-.910	-.934	-.975	-.872	
	75.00	-.645	-.672	-.686	-1.009	-.966	-.950	-.743	-.721	-.880	-.934	-.957	-.872	
	80.00	-.633	-.682	-.614	-.968	-.950	-.949	-.667	-.708	-.723	-.922	-.943	-.871	
	85.00	-.679	-.698	-.603	-.942	-.932	-.949	-.709	-.684	-.703	-.918	-.929	-.868	
	90.00	-.674	-.696	-.617	-.911	-.898	-.952	-.675	-.660	-.707	-.914	-.904	-.865	
	95.00	-.661	-.688	-.596	-.867	-.864	-.958	-.604	-.656	-.707	-.901	-.880	-.869	
		-.568	-.584	-.571	-.821	-.869	-.954	-.512	-.611	-.707	-.890	-.894	-.861	
	1.25	.977	.906	.828	.775	.719	.635	1.015	.936	.846	.778	.715	.646	
	2.50	1.010	.859	.806	.767	.732	.618	1.073	.909	.843	.796	.756	.636	
	5.00	.919	.780	.741	.712	.689	.597	.981	.841	.793	.758	.732	.627	
	7.50	.830	.716	.688	.662	.647	.553	.887	.784	.743	.716	.698	.591	
	10.00	.754	.671	.650	.624	.602	.512	.819	.739	.703	.680	.660	.553	
	15.00	.663	.601	.579	.563	.540	.427	.726	.669	.636	.614	.593	.477	
	20.00	.589	.567	.525	.496	.484	.351	.652	.617	.583	.557	.542	.407	
	25.00	.542	.502	.475	.455	.443	.290	.601	.572	.536	.513	.499	.343	
30.00	.493	.457	.435	.420	.401	.225	.557	.523	.495	.473	.458	.274		
40.00	.407	.413	.396	.375	.358	.192	.468	.476	.456	.431	.411	.244		
45.00	.407	.379	.362	.338	.325	.128	.464	.442	.420	.393	.383	.180		
50.00	.343	.341	.327	.298	.289	.064	.440	.407	.389	.355	.343	.118		
55.00	.322	.301	.281	.263	.253	.032	.380	.365	.349	.319	.308	.085		
60.00	.281	.271	.263	.243	.209	-.002	.338	.331	.321	.300	.263	.055		
65.00	.276	.244	.230	.209	.173	-.027	.330	.299	.284	.268	.226	.029		
70.00	.232	.210	.208	.181	.137	-.054	.284	.267	.260	.237	.195	.004		
75.00	.194	.198	.185	.162	.130	-.076	.241	.252	.238	.217	.183	-.017		
80.00	.173	.165	.159	.138	.101	-.085	.222	.215	.207	.187	.147	-.033		
85.00	.148	.148	.120	.101	.081	-.108	.191	.188	.191	.163	.123	-.051		
90.00	.117	.126	.125	.101	.056	-.071	.154	.165	.166	.144	.099	-.037		
95.00	.095	.100	.097	.080	.041	-.123	.118	.135	.131	.115	.076	-.084		
	.062	.056	.057	.023	-.001	-.110	.075	.084	.083	.051	.029	-.084		
Upper surface		M = 0.98 α = 20.13°						M = 0.98 α = 22.24°						
	0.30	-.027	-.850	-1.047	-1.159	-1.047	-.931	-.104	-.987	-1.141	-1.055	-.988	-.974	
	1.25	-.971	-1.333	-1.288	-1.106	-1.004	-.908	-1.052	-1.265	-1.190	-1.043	-.982	-.945	
	2.50	-1.072	-1.315	-1.265	-1.108	-1.004	-.908	-1.133	-1.236	-1.195	-1.044	-.977	-.945	
	5.00	-1.143	-1.314	-1.288	-1.102	-1.003	-.907	-1.182	-1.232	-1.195	-1.034	-.980	-.941	
	7.50	-1.107	-1.309	-1.259	-1.101	-.996	-.908	-1.159	-1.229	-1.168	-1.036	-.975	-.943	
	10.00	-1.070	-1.296	-1.281	-1.099	-.997	-.908	-1.136	-1.223	-1.172	-1.039	-.972	-.942	
	15.00	-.922	-1.274	-1.281	-1.089	-.999	-.909	-.919	-1.234	-1.173	-1.035	-.983	-.941	
	20.00	-.752	-1.236	-1.270	-1.075	-1.000	-.908	-.786	-1.206	-1.168	-1.020	-.993	-.941	
	25.00	-.709	-1.227	-1.231	-1.075	-.993	-.907	-.739	-1.189	-1.128	-1.031	-.989	-.937	
	30.00	-.700	-.922	-1.212	-1.062	-.990	-.906	-.724	-1.076	-1.128	-1.021	-.992	-.930	
	35.00	-.686	-.738	-1.181	-1.060	-.986	-.904	-.686	-.891	-1.122	-1.019	-.989	-.927	
	40.00	-.705	-.699	-1.153	-1.048	-.981	-.907	-.694	-.806	-1.122	-1.021	-.984	-.935	
	45.00	-.675	-.695	-1.117	-1.034	-.977	-.905	-.659	-.794	-1.104	-1.021	-.987	-.929	
	50.00	-.673	-.689	-.999	-.977	-.909	-.904	-.659	-.794	-.979	-1.021	-.984	-.921	
	55.00	-.678	-.677	-1.055	-1.014	-.967	-.906	-.681	-.815	-1.077	-1.023	-.980	-.932	
60.00	-.725	-.686	-1.035	-.995	-.965	-.906	-.760	-.835	-1.063	-1.008	-.978	-.931		
65.00	-.695	-.708	-1.009	-.991	-.958	-.902	-.786	-.838	-1.046	-1.002	-.973	-.920		
70.00	-.645	-.728	-.986	-.987	-.948	-.903	-.751	-.826	-1.030	-.998	-.963	-.923		
75.00	-.635	-.746	-.952	-.981	-.946	-.906	-.756	-.822	-1.007	-1.000	-.956	-.929		
80.00	-.703	-.777	-.916	-.978	-.927	-.907	-.817	-.827	-.991	-.996	-.951	-.924		
85.00	-.782	-.778	-.878	-.977	-.924	-.900	-.782	-.790	-.954	-.975	-.992	-.933		
90.00	-.729	-.782	-.857	-.967	-.909	-.902	-.780	-.805	-.954	-.979	-.919	-.921		
95.00	-.704	-.769	-.836	-.961	-.930	-.902	-.717	-.790	-.935	-.972	-.936	-.921		
Lower surface	1.25	1.021	.947	.846	.764	.687	.621	1.002	.957	.844	.749	.667	.604	
	2.50	1.101	.942	.865	.802	.754	.630	1.106	.971	.882	.804	.755	.625	
	5.00	1.025	.888	.827	.783	.743	.630	1.053	.943	.862	.783	.735	.625	
	7.50	.937	.832	.785	.746	.722	.606	.977	.884	.826	.773	.805	.625	
	10.00	.870	.793	.747	.715	.688	.572	.913	.840	.791	.752	.747	.597	
	15.00	.779	.722	.688	.658	.629	.504	.824	.774	.734	.704	.671	.534	
	20.00	.712	.656	.633	.602	.583	.439	.756	.714	.681	.647	.626	.478	
	25.00	.655	.622	.586	.561	.542	.379	.705	.669	.633	.602	.586	.415	
	30.00	.611	.575	.544	.524	.504	.349	.662	.629	.592	.563	.548	.399	
	35.00	.530	.531	.501	.484	.455	.280	.604	.585	.552	.523	.500	.319	
	40.00	.522	.492	.466	.443	.426	.222	.571	.544	.518	.489	.471	.263	
	45.00	.496	.457	.429	.403	.388	.159	.542	.508	.488	.451	.434	.201	
	50.00	.428	.414	.393	.369	.349	.127	.484	.465	.441	.409	.395	.170	
	55.00	.391	.380	.363	.343	.305	.093	.438	.427	.410	.386	.350	.137	
	60.00	.382	.346	.326	.306	.266	.066	.425	.396	.372	.350	.311	.108	
	65.00	.332	.309	.300	.270	.231	.040	.377	.359	.343	.314	.275	.081	
70.00	.272	.293	.285	.254	.219	.014	.323	.319	.303	.274	.236	.056		
75.00	.262	.253	.241	.223	.182	-.005	.299	.297	.282	.258	.226	.030		
80.00	.230	.230	.218	.195	.156	-.028	.263	.268	.251	.231	.194	.005		
85.00	.185	.201	.192	.172	.127	-.016	.218	.236	.226	.203	.163	.011		
90.00	.146	.163	.155	.138	.097	-.066	.175	.199	.183	.168	.132	-.043		
95.00	.093	.105	.099	.069	.043	-.071	.104	.129	.121	.090	.071	-.050		

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
 RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

		Pressure coefficient at:													
		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2	
Upper surface	Percent c	M = 0.98 α = 24.37°							M = 0.98 α = 26.48°						
	0.30	-1.159	-1.095	-1.225	-1.100	-1.072	-1.001		-1.227	-1.164	-1.189	-1.132	-1.107	-1.058	
	1.25	-1.131	-1.226	-1.171	-1.090	-1.055	-0.974		-1.169	-1.195	-1.167	-1.123	-1.095	-1.031	
	2.50	-1.169	-1.208	-1.153	-1.089	-1.053	-0.973		-1.171	-1.184	-1.152	-1.122	-1.091	-1.030	
	5.00	-1.256	-1.204	-1.170	-1.082	-1.050	-0.970		-1.214	-1.185	-1.169	-1.115	-1.089	-1.026	
	7.50	-1.233	-1.205	-1.146	-1.082	-1.044	-0.970		-1.206	-1.181	-1.146	-1.115	-1.082	-1.025	
	10.00	-1.210	-1.202	-1.157	-1.082	-1.042	-0.968		-1.197	-1.180	-1.157	-1.116	-1.078	-1.025	
	15.00	-1.074	-1.207	-1.155	-1.077	-1.044	-0.968		-1.129	-1.189	-1.161	-1.111	-1.084	-1.026	
	20.00	-0.889	-1.196	-1.153	-1.067	-1.045	-0.966		-0.951	-1.185	-1.163	-1.099	-1.089	-1.025	
	25.00	-0.818	-1.179	-1.141	-1.072	-1.040	-0.963		-0.854	-1.173	-1.150	-1.109	-1.081	-1.020	
	30.00	-0.810	-1.157	-1.141	-1.065	-1.037	-0.961		-0.860	-1.161	-1.155	-1.099	-1.081	-1.015	
	35.00	-0.779	-1.126	-1.139	-1.065	-1.034	-0.959		-0.865	-1.140	-1.152	-1.099	-1.077	-1.011	
	40.00	-0.777	-1.045	-1.140	-1.065	-1.028	-0.960		-0.869	-1.080	-1.154	-1.098	-1.073	-1.017	
	45.00	-0.743	-0.974	-1.127	-1.064	-1.025	-0.957		-0.838	-1.015	-1.148	-1.095	-1.073	-1.013	
	50.00	-0.750	-0.923	-1.113	-1.061	-1.021	-0.955		-0.829	-0.971	-1.134	-1.092	-1.068	-1.011	
	55.00	-0.740	-0.891	-1.104	-1.054	-1.017	-0.955		-0.808	-0.936	-1.130	-1.088	-1.067	-1.011	
	60.00	-0.805	-0.885	-1.095	-1.032	-1.014	-0.952		-0.850	-0.935	-1.126	-1.063	-1.045	-1.008	
	65.00	-0.826	-0.869	-1.085	-1.032	-1.007	-0.945		-0.864	-0.919	-1.117	-1.065	-1.059	-1.000	
	70.00	-0.786	-0.857	-1.079	-1.031	-1.001	-0.947		-0.826	-0.899	-1.111	-1.064	-1.047	-1.000	
	75.00	-0.783	-0.852	-1.059	-1.025	-0.997	-0.947		-0.828	-0.886	-1.095	-1.064	-1.047	-1.005	
	80.00	-0.843	-0.857	-1.049	-1.022	-0.991	-0.944		-0.854	-0.889	-1.086	-1.064	-1.042	-1.000	
	85.00	-0.832	-0.854	-1.033	-1.022	-0.973	-0.940		-0.862	-0.886	-1.067	-1.063	-1.021	-0.992	
	90.00	-0.824	-0.860	-1.011	-1.014	-0.956	-0.941		-0.868	-0.899	-1.046	-1.052	-1.003	-0.993	
	95.00	-0.798	-0.845	-0.993	-1.002	-0.976	-0.938		-0.820	-0.864	-1.025	-1.029	-1.017	-0.994	
Lower surface	1.25	0.968	0.956	0.839	0.738	0.639	0.592		0.932	0.956	0.828	0.715	0.608	0.566	
	2.50	1.100	0.991	0.894	0.811	0.751	0.622		1.090	1.007	0.895	0.803	0.739	0.604	
	5.00	1.070	0.965	0.890	0.831	0.785	0.649		1.084	0.990	0.907	0.840	0.791	0.643	
	7.50	1.007	0.919	0.864	0.812	0.824	0.642		1.031	0.957	0.889	0.831	0.789	0.646	
	10.00	0.948	0.885	0.834	0.790	0.752	0.622		0.979	0.926	0.869	0.816	0.772	0.631	
	15.00	0.863	0.821	0.783	0.740	0.705	0.569		0.897	0.862	0.818	0.775	0.733	0.583	
	20.00	0.796	0.766	0.729	0.692	0.664	0.511		0.834	0.813	0.769	0.729	0.695	0.532	
	25.00	0.749	0.718	0.686	0.651	0.625	0.455		0.789	0.765	0.727	0.688	0.656	0.483	
	30.00	0.708	0.673	0.643	0.614	0.586	0.398		0.746	0.720	0.686	0.656	0.617	0.428	
	35.00	0.632	0.633	0.602	0.571	0.542	0.364		0.673	0.678	0.646	0.613	0.577	0.393	
	40.00	0.615	0.589	0.568	0.535	0.513	0.307		0.655	0.639	0.609	0.576	0.547	0.335	
	45.00	0.587	0.554	0.530	0.495	0.478	0.245		0.629	0.600	0.573	0.536	0.511	0.277	
	50.00	0.526	0.513	0.491	0.460	0.439	0.213		0.567	0.555	0.534	0.498	0.476	0.243	
	55.00	0.482	0.474	0.460	0.430	0.396	0.179		0.527	0.520	0.503	0.471	0.428	0.210	
60.00	0.460	0.439	0.424	0.393	0.354	0.147		0.503	0.483	0.463	0.435	0.388	0.178		

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
 RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

		Pressure coefficient at:												
		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2
	Percent	$M = 1.00$						$M = 1.00$						
	c	$\alpha = -2.00^\circ$						$\alpha = -0.01^\circ$						
Upper surface	0.00	.074	.758	.708	.675	.616	.539	.067	.768	.722	.687	.687	.724	
	1.25	.374	.297	.322	.328	.306	.343	.260	.088	.079	.015	-.022	.103	
	2.50	.325	.220	.229	.220	.221	.217	.205	.042	.033	-.013	-.058	-.082	
	5.00	.273	.192	.179	.170	.150	.184	.151	.041	.033	-.022	-.068	-.089	
	7.50	.242	.162	.147	.131	.106	.130	.126	.041	.015	-.035	-.084	-.099	
	10.00	.211	.139	.114	.106	.076	.091	.100	.032	-.008	-.051	-.094	-.116	
	15.00	.168	.107	.080	.080	.042	.014	.072	.014	-.029	-.059	-.105	-.140	
	20.00	.105	.074	.048	.041	.014	.054	.044	.016	-.055	-.087	-.113	-.165	
	25.00	.092	.057	.029	.018	.017	.151	.005	-.030	-.065	-.100	-.130	-.232	
	30.00	.058	.041	.019	.010	.030	.182	-.055	-.045	-.086	-.118	-.138	-.236	
	35.00	.030	.012	-.008	-.030	.060	.204	-.045	-.074	-.102	-.123	-.164	-.233	
	40.00	.006	.003	-.030	-.066	.083	.265	-.072	-.089	-.113	-.154	-.184	-.285	
	45.00	-.001	-.013	-.051	-.087	.112	.262	-.087	-.097	-.126	-.165	-.202	-.272	
	50.00	.009	-.034	-.081	-.110	.144	.286	-.083	-.097	-.148	-.189	-.230	-.295	
	55.00	-.029	-.072	-.113	-.140	.171	.294	-.088	-.133	-.178	-.211	-.251	-.306	
	60.00	-.083	-.103	-.128	-.156	.199	.283	-.144	-.169	-.198	-.228	-.270	-.293	
	65.00	-.086	-.103	-.136	-.171	.205	.306	-.149	-.169	-.207	-.250	-.275	-.322	
	70.00	-.101	-.113	-.136	-.176	.238	.311	-.168	-.178	-.207	-.259	-.302	-.329	
75.00	-.106	-.125	-.154	-.176	.250	.298	-.169	-.192	-.222	-.255	-.317	-.317		
80.00	-.129	-.148	-.154	-.182	.261	.291	-.190	-.211	-.222	-.251	-.317	-.305		
85.00	-.155	-.136	-.154	-.189	.254	.272	-.220	-.203	-.225	-.248	-.297	-.287		
90.00	-.125	-.131	-.143	-.188	.233	.254	-.188	-.200	-.213	-.248	-.268	-.269		
95.00	-.100	-.131	-.143	-.181	.243	.264	-.139	-.189	-.205	-.233	-.268	-.276		
Lower surface	1.25	.146	-.129	-.301	-.567	-.707	-.765	.251	.127	.069	.031	.033	-.033	
	2.50	.091	-.102	-.154	-.432	-.588	-.709	.199	.067	.041	.008	.001	-.035	
	5.00	.066	-.033	-.104	-.162	-.320	-.636	.164	.077	.036	.008	.026	-.052	
	7.50	.048	-.044	-.113	-.174	-.204	-.569	.136	.053	.015	-.021	-.039	-.074	
	10.00	.012	-.052	-.109	-.183	-.224	-.467	.102	.034	.001	-.044	-.054	-.084	
	15.00	-.002	-.052	-.111	-.167	-.220	-.315	.072	.020	-.014	-.054	-.074	-.112	
	20.00	-.031	-.053	-.115	-.187	-.241	-.310	.043	.004	-.040	-.077	-.100	-.164	
	25.00	-.049	-.062	-.106	-.168	-.221	-.310	.020	-.003	-.047	-.080	-.108	-.123	
	30.00	-.036	-.072	-.120	-.177	-.227	-.257	.025	-.023	-.064	-.086	-.120	-.227	
	35.00	-.054	-.110	-.149	-.204	-.246	-.233	-.047	-.058	-.091	-.137	-.160	-.243	
	40.00	-.107	-.121	-.154	-.215	-.253	-.269	-.025	-.072	-.118	-.167	-.187	-.276	
	45.00	-.077	-.118	-.167	-.227	-.272	-.299	-.023	-.107	-.153	-.196	-.214	-.296	
	50.00	-.125	-.155	-.198	-.251	-.287	-.322	-.082	-.107	-.153	-.196	-.214	-.296	
	55.00	-.150	-.176	-.212	-.266	-.314	-.341	-.104	-.128	-.172	-.207	-.248	-.313	
	60.00	-.180	-.202	-.233	-.288	-.334	-.344	-.138	-.156	-.189	-.229	-.269	-.318	
	65.00	-.193	-.211	-.244	-.305	-.354	-.344	-.147	-.165	-.199	-.248	-.291	-.322	
	70.00	-.200	-.201	-.244	-.292	-.347	-.340	-.155	-.158	-.199	-.235	-.287	-.322	
	75.00	-.253	-.234	-.253	-.306	-.358	-.327	-.210	-.194	-.205	-.246	-.308	-.310	
	80.00	-.257	-.254	-.264	-.314	-.342	-.338	-.215	-.215	-.217	-.256	-.314	-.320	
	85.00	-.271	-.262	-.266	-.305	-.341	-.280	-.228	-.218	-.222	-.248	-.318	-.262	
	90.00	-.258	-.266	-.271	-.293	-.327	-.319	-.214	-.221	-.222	-.248	-.303	-.296	
	95.00	-.179	-.232	-.253	-.278	-.291	-.288	-.157	-.201	-.206	-.261	-.285	-.256	
	Upper surface		$M = 1.00$						$M = 1.00$					
			$\alpha = 1.90^\circ$						$\alpha = 3.93^\circ$					
		0.00	.093	.734	.646	.653	.630	.713	.089	.623	.482	.463	.463	.668
		1.25	.179	.097	-.183	-.572	-.678	-.536	.050	-.784	-.899	-.973	-.994	-.746
		2.50	.118	-.109	-.168	-.293	-.589	-.723	-.008	-.417	-.784	-.871	-.923	-.981
5.00		.054	-.072	-.105	-.206	-.287	-.656	-.121	-.305	-.639	-.795	-.848	-.919	
7.50		.036	-.043	-.100	-.196	-.254	-.584	-.120	-.176	-.205	-.741	-.797	-.858	
10.00		.017	-.040	-.107	-.189	-.248	-.518	-.118	-.162	-.215	-.699	-.765	-.821	
15.00		.020	-.043	-.112	-.159	-.249	-.352	-.072	-.146	-.208	-.288	-.745	-.810	
20.00		.015	-.073	-.122	-.183	-.242	-.293	-.065	-.161	-.232	-.290	-.684	-.780	
25.00		-.047	-.068	-.124	-.174	-.227	-.311	-.128	-.156	-.216	-.270	-.417	-.779	
30.00		-.116	-.092	-.138	-.188	-.233	-.256	-.197	-.176	-.222	-.277	-.310	-.735	
35.00		-.089	-.120	-.156	-.199	-.251	-.248	-.158	-.197	-.237	-.284	-.322	-.669	
40.00		-.115	-.126	-.171	-.227	-.268	-.292	-.191	-.206	-.258	-.311	-.340	-.682	
45.00		-.136	-.142	-.187	-.238	-.288	-.298	-.208	-.218	-.269	-.322	-.356	-.647	
50.00		-.115	-.143	-.194	-.250	-.307	-.321	-.191	-.218	-.279	-.339	-.380	-.637	
55.00		-.126	-.173	-.218	-.264	-.329	-.331	-.198	-.242	-.293	-.355	-.401	-.572	
60.00		-.180	-.204	-.232	-.275	-.337	-.314	-.251	-.271	-.309	-.362	-.419	-.451	
65.00		-.185	-.204	-.247	-.292	-.331	-.344	-.257	-.272	-.318	-.373	-.417	-.405	
70.00		-.203	-.208	-.241	-.292	-.344	-.346	-.268	-.277	-.312	-.375	-.428	-.367	
75.00		-.203	-.222	-.251	-.293	-.347	-.340	-.263	-.289	-.325	-.370	-.431	-.353	
80.00		-.229	-.242	-.254	-.291	-.330	-.325	-.290	-.306	-.325	-.374	-.431	-.353	
85.00		-.257	-.238	-.254	-.289	-.307	-.306	-.316	-.306	-.325	-.371	-.386	-.365	
90.00		-.227	-.237	-.246	-.276	-.281	-.289	-.296	-.306	-.316	-.361	-.335	-.360	
95.00		-.151	-.215	-.237	-.242	-.265	-.294	-.207	-.279	-.310	-.333	-.312	-.373	
Lower surface		$M = 1.00$						$M = 1.00$						
		$\alpha = 1.90^\circ$						$\alpha = 3.93^\circ$						
	1.25	.377	.340	.318	.330	.371	.293	.492	.502	.482	.499	.531	.438	
	2.50	.329	.249	.248	.260	.278	.234	.451	.394	.401	.409	.425	.373	
	5.00	.289	.216	.201	.204	.194	.189	.408	.337	.331	.321	.329	.313	
	7.50	.253	.179	.161	.161	.160	.135	.359	.286	.265	.265	.275	.246	
	10.00	.213	.155	.131	.124	.122	.100	.314	.253	.241	.230	.226	.201	
	15.00	.176	.127	.102	.091	.073	.038	.265	.218	.205	.189	.170	.118	
	20.00	.141	.099	.069	.047	.035	.043	.223	.216	.163	.134	.132	.037	
	25.00	.120	.086	.061	.026	.006	-.122	.195	.172	.132	.102	.095	-.045	
	30.00	.110	.062	.045	.012	-.012	-.166	.178	.134	.110	.080	.064	-.094	
	35.00	.066	.037	.020	-.020	-.049	-.158	.114	.102	.077	.045	.029	-.125	
	40.00	.042	.025	-.001	-.043	-.084	-.185	.105	.085	.054	.017	.006	-.163	
	45.00	.051	.001	-.032	-.078	-.095	-.257	.105	.058	.020	-.017	-.026	-.218	
	50.00	-.012	-.032	-.062	-.103	-.120	-.277	.039	.022	-.010	-.042	-.053	-.248	
	55.00	-.034	-.055	-.082	-.120	-.157	-.290	.013	-.004	-.028	-.057	-.099	-.272	
	60.00	-.064	-.080	-.109	-.140	-.184	-.290	-.008	-.023	-.048	-.080	-.124	-.288	
	65.00	-.074	-.089	-.112	-.159	-.216	-.291	-.018	-.037	-.059	-.101	-.153	-.304	
	70.00	-.076	-.084	-.118	-.149	-.212	-.291	-.022	-.037	-.067	-.102	-.156	-.308	
	75.00	-.137	-.122	-.135	-.163	-.238	-.280	-.085	-.075	-.090	-.124	-.184	-.309	
80.00	-.141	-.141	-.148	-.180	-.255	-.299	-.091	-.086	-.104	-.143	-.203	-.314		
85.00	-.183	-.139	-.146	-.187	-.267	-.305	-.088	-.086	-.108	-.149	-.217	-.310		
90.00	-.135	-.139	-.146	-.187	-.263	-.272	-.088	-.092	-.108	-.151	-.207	-.310		
95.00	-.097	-.123	-.143	-.201	-.244	-.234	-.070	-.083	-.103	-.160	-.211	-.272		

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
 RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

		Pressure coefficient at:													
		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2	
	Percent c	M = 1.00 α = 5.90°							M = 1.00 α = 7.90°						
Upper surface	0.00	.088	.504		.308	.253	.577		.062	.339	.191	.086	-.036	.400	
	1.25	-.073	-.976	-1.062	-1.117	-1.137	-.897		-.210	-1.149	-1.197	-1.229	-1.253	-1.065	
	2.50	-.139	-.886	-.943	-1.022	-1.073	-1.127		-.287	-1.070	-1.090	-1.168	-1.218	-1.256	
	5.00	-.272	-.588	-.868	-.939	-.988	-1.062		-.436	-.798	-1.019	-1.078	-1.137	-1.204	
	7.50	-.256	-.282	-.808	-.885	-.930	-.996		-.407	-.536	-.957	-1.028	-1.076	-1.143	
	10.00	-.240	-.265	-.761	-.853	-.917	-.963		-.377	-.444	-.928	-.995	-1.064	-1.110	
	15.00	-.161	-.237	-.318	-.785	-.878	-.935		-.285	-.373	-.851	-.925	-1.019	-1.074	
	20.00	-.144	-.237	-.297	-.760	-.839	-.907		-.255	-.346	-.849	-.897	-.972	-1.045	
	25.00	-.202	-.231	-.292	-.596	-.798	-.899		-.287	-.331	-.422	-.866	-.935	-1.034	
	30.00	-.262	-.243	-.291	-.408	-.778	-.864		-.343	-.331	-.379	-.846	-.916	-1.007	
	35.00	-.229	-.266	-.304	-.367	-.767	-.789		-.313	-.348	-.379	-.717	-.907	-.922	
	40.00	-.263	-.277	-.325	-.364	-.739	-.801		-.347	-.357	-.389	-.581	-.898	-.924	
	45.00	-.272	-.284	-.336	-.373	-.618	-.769		-.336	-.363	-.403	-.539	-.895	-.895	
	50.00	-.254	-.284	-.347	-.391	-.505	-.772		-.336	-.366	-.410	-.519	-.893	-.905	
	55.00	-.264	-.307	-.358	-.410	-.482	-.772		-.346	-.385	-.428	-.511	-.888	-.901	
	60.00	-.315	-.332	-.370	-.416	-.477	-.760		-.392	-.410	-.437	-.499	-.827	-.892	
Lower surface	65.00	-.320	-.335	-.377	-.431	-.465	-.772		-.398	-.414	-.445	-.506	-.708	-.902	
	70.00	-.324	-.336	-.375	-.431	-.477	-.776		-.402	-.419	-.441	-.506	-.670	-.909	
	75.00	-.311	-.347	-.384	-.430	-.482	-.773		-.381	-.427	-.455	-.496	-.644	-.905	
	80.00	-.347	-.367	-.385	-.434	-.487	-.770		-.420	-.445	-.453	-.498	-.618	-.908	
	85.00	-.372	-.367	-.387	-.430	-.469	-.767		-.444	-.442	-.454	-.500	-.573	-.913	
	90.00	-.353	-.367	-.376	-.422	-.411	-.760		-.424	-.444	-.444	-.495	-.485	-.914	
	95.00	-.271	-.350	-.376	-.405	-.370	-.742		-.344	-.428	-.444	-.476	-.391	-.929	
	1.25	.611	.617	.589	.603	.625	.520		.713	.713	.677	.673	.679	.577	
	2.50	.570	.509	.508	.515	.526	.457		.680	.607	.603	.597	.593	.516	
	5.00	.516	.438	.425	.422	.425	.394		.618	.525	.514	.503	.502	.457	
	7.50	.460	.379		.362	.368	.328		.551	.464	.453	.446	.442	.389	
	10.00	.406	.346	.331	.322	.315	.277		.492	.431	.420	.401	.390	.336	
	15.00	.347	.298	.282	.269	.258	.186		.426	.368	.356	.340	.323	.245	
	20.00	.294	.276	.235	.212	.208	.106		.366	.342	.306	.283	.273	.160	
	25.00	.261	.230	.199	.176	.169	.028		.324	.291	.266	.244	.228	.090	
	30.00	.238	.194	.172	.152	.134	-.028		.296	.250	.237	.213	.198	.028	
35.00	.161	.161	.138	.113	.097	-.036		.212	.215	.202	.173	.154	.009		
40.00	.161	.137	.111	.084	.072	-.109		.175	.189	.172	.145	.127	-.063		
45.00	.158	.107	.078	.052	.038	-.169		.207	.159	.140	.111	.095	-.121		
50.00	.092	.073	.049	.024	.006	-.197		.137	.121	.107	.078	.061	-.154		
55.00	.060	.045	.030	.006	-.035	-.227		.104	.094	.088	.065	.017	-.182		
60.00	.047	.026	.005	-.017	-.062	-.242		.103	.075	.063	.035	-.013	-.202		
65.00	.028	.008	-.010	-.040	-.093	-.267		.073	.053	.047	.011	-.045	-.235		
70.00	.028	.005	-.019	-.044	-.098	-.277		.059	.046	.033	.001	-.052	-.239		
75.00	-.036	-.033	-.047	-.075	-.132	-.278		.036	.014	.006	-.031	-.089	-.241		
80.00	-.044	-.041	-.057	-.091	-.153	-.286		.008	.007	.001	-.034	-.099	-.258		
85.00	-.053	-.044	-.056	-.091	-.166	-.238		-.006	.002	.000	-.035	-.113	-.215		
90.00	-.048	-.047	-.061	-.089	-.163	-.288		-.008	.004	.006	-.035	-.104	-.263		
95.00	-.048	-.053	-.059	-.102	-.154	-.257		-.020	-.020	-.015	-.053	-.102	-.250		
Upper surface		M = 1.00 α = 9.87°							M = 1.00 α = 13.74°						
	0.00	.049	.179	.009	-.153	-.328	.191		-.029	-.191	-.431	-.652	-.823	-.356	
	1.25	-.321	-1.212	-1.253	-1.259	-1.268	-1.153		-.528	-1.219	-1.190	-1.171	-1.208	-1.232	
	2.50	-.407	-1.132	-1.161	-1.226	-1.249	-1.282		-.645	-1.182	-1.170	-1.172	-1.199	-1.266	
	5.00	-.559	-.940	-1.112	-1.153	-1.191	-1.241		-.713	-1.136	-1.198	-1.166	-1.203	-1.259	
	7.50	-.524	-.723	-1.046	-1.112	-1.137	-1.204		-.734	-1.080	-1.137	-1.161	-1.177	-1.249	
	10.00	-.489	-.643	-1.024	-1.076	-1.120	-1.175		-.695	-1.028	-1.109	-1.149	-1.160	-1.246	
	15.00	-.391	-.550	-.955	-1.016	-1.085	-1.140		-.574	-.949	-1.029	-1.105	-1.152	-1.223	
	20.00	-.338	-.496	-.675	-.982	-1.049	-1.116		-.499	-.864	-.968	-1.062	-1.132	-1.209	
	25.00	-.353	-.440	-.604	-.960	-1.006	-1.103		-.480	-.803	-.923	-1.038	-1.108	-1.193	
	30.00	-.401	-.400	-.545	-.943	-.993	-1.074		-.504	-.802	-.889	-1.002	-1.084	-1.169	
	35.00	-.437	-.397	-.489	-.922	-.985	-.992		-.473	-.850	-.870	-.970	-1.063	-1.115	
	40.00	-.405	-.398	-.456	-.788	-.976	-.988		-.492	-.875	-.852	-.940	-1.043	-1.108	
	45.00	-.387	-.402	-.458	-.692	-.973	-.961		-.485	-.897	-.834	-.924	-1.035	-1.088	
	50.00	-.392	-.408	-.468	-.676	-.970	-.973		-.504	-.903	-.808	-.914	-1.011	-1.081	
	55.00	-.410	-.428	-.481	-.670	-.969	-.972		-.521	-.923	-.777	-.902	-.998	-1.071	
60.00	-.450	-.455	-.491	-.649	-.967	-.965		-.547	-.946	-.734	-.882	-.972	-1.064		
65.00	-.454	-.459	-.489	-.636	-.949	-.972		-.550	-.957	-.674	-.877	-.926	-1.043		
70.00	-.460	-.465	-.495	-.617	-.862	-.977		-.552	-.962	-.616	-.876	-.871	-1.022		
75.00	-.439	-.476	-.507	-.596	-.772	-.985		-.545	-.970	-.577	-.863	-.821	-1.007		
80.00	-.474	-.494	-.510	-.583	-.702	-.985		-.579	-.990	-.563	-.848	-.781	-.990		
85.00	-.492	-.494	-.512	-.571	-.619	-.986		-.589	-.996	-.568	-.834	-.726	-.996		
90.00	-.482	-.497	-.503	-.555	-.555	-.993		-.583	-.995	-.562	-.814	-.677	-1.019		
95.00	-.387	-.466	-.505	-.534	-.510	-1.014		-.496	-.949	-.567	-.600	-.652	-1.026		
Lower surface	1.25	.799	.786	.736	.724	.719	.617		.944	.890	.824	.785	.747	.657	
	2.50	.774	.691	.672	.658	.657	.566		.957	.823	.784	.758	.731	.624	
	5.00	.705	.608	.587	.571	.570	.516		.874	.740	.710	.685	.670	.589	
	7.50	.630	.540	.525	.504	.512	.453		.787	.671	.653	.631	.624	.535	
	10.00	.570	.505	.487	.468	.459	.396		.714	.632	.617	.593	.574	.484	
	15.00	.492	.440	.422	.406	.397	.305		.625	.567	.544	.529	.510	.407	
	20.00	.426	.405	.367	.340	.345	.229		.555	.527	.488	.464	.456	.330	
	25.00	.382	.352	.327	.302	.300	.158		.500	.469	.444	.423	.411	.284	
	30.00	.349	.312	.290	.271	.264	.088		.465	.425	.405	.386	.368	.248	
	35.00	.263	.273	.254	.233	.221	.071		.374	.365	.368	.345	.324	.164	
	40.00	.266	.244	.226	.197	.192	-.003		.380	.353	.335	.311	.297	.102	
	45.00	.255	.212	.190	.166	.159	-.062		.363	.318	.300	.277	.261	.037	
	50.00	.183	.175	.162	.134	.123	-.098		.290	.281	.270	.241	.227	.001	
	55.00	.151	.147	.134	.114	.083	-.125		.255	.251	.242	.222	.183	-.055	
	60.00	.150	.124	.111	.086	.045	-.146		.255	.221	.211	.191	.145	-.075	
	65.00	.119	.102	.093	.061	.013	-.184		.214	.194	.192	.159	.112	-.081	
70.00	.091	.093	.076	.047	.007	-.179		.175	.182	.174	.146	.113	-.092		
75.00	.073	.063	.053	.025	.002	-.195		.127	.127	.127	.108	.078	-.102		
80.00	.057	.056	.049	.015	-.032	-.207		.100	.138	.134	.110	.065	-.115		
85.00	.040	.049	.043	.015	-.040	-.160		.108	.123	.126	.100	.047	-.084		
90.00	.029	.036	.034	.011	-.037	-.206		.087	.101	.099	.085	.041	-.126		
95.00	.014	.009	.015	-.019	-.048	-.176		.067	.062	.069	.036	.007	-.108		

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
 RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

		Pressure coefficient at:																																															
		0.16b/2						0.25b/2						0.40b/2						0.60b/2						0.75b/2						0.95b/2																	
		M = 1.00												α = 15.83°												M = 1.00												α = 18.03°											
Upper surface	Percent c																																																
	0.00	-.054	-.423	-.645	-.888	-1.008	-.663	-.072	-.613	-.826	-1.042	-1.124	-.879	-.054	-.423	-.645	-.888	-1.008	-.663	-.072	-.613	-.826	-1.042	-1.124	-.879																								
	1.25	-.657	-1.280	-1.231	-1.171	-1.089	-.983	-.787	-1.299	-1.254	-1.111	-1.012	-.905	-.657	-1.280	-1.231	-1.171	-1.089	-.983	-.787	-1.299	-1.254	-1.111	-1.012	-.905																								
	2.50	-.778	-1.271	-1.202	-1.172	-1.088	-.979	-.908	-1.287	-1.225	-1.105	-1.013	-.902	-.778	-1.271	-1.202	-1.172	-1.088	-.979	-.908	-1.287	-1.225	-1.105	-1.013	-.902																								
	5.00	-.898	-1.232	-1.228	-1.172	-1.087	-.969	-1.006	-1.275	-1.252	-1.098	-1.019	-.895	-.898	-1.232	-1.228	-1.172	-1.087	-.969	-1.006	-1.275	-1.252	-1.098	-1.019	-.895																								
	7.50	-.861	-1.186	-1.204	-1.172	-1.078	-.964	-.974	-1.263	-1.225	-1.096	-1.020	-.896	-.861	-1.186	-1.204	-1.172	-1.078	-.964	-.974	-1.263	-1.225	-1.096	-1.020	-.896																								
	10.00	-.823	-1.145	-1.203	-1.181	-1.080	-.964	-.942	-1.236	-1.246	-1.094	-1.029	-.895	-.823	-1.145	-1.203	-1.181	-1.080	-.964	-.942	-1.236	-1.246	-1.094	-1.029	-.895																								
	15.00	-.691	-1.079	-1.149	-1.170	-1.078	-.964	-.802	-1.185	-1.224	-1.087	-1.043	-.892	-.691	-1.079	-1.149	-1.170	-1.078	-.964	-.802	-1.185	-1.224	-1.087	-1.043	-.892																								
	20.00	-.597	-1.039	-1.102	-1.145	-1.072	-.964	-.655	-1.138	-1.195	-1.075	-1.052	-.890	-.597	-1.039	-1.102	-1.145	-1.072	-.964	-.655	-1.138	-1.195	-1.075	-1.052	-.890																								
	25.00	-.547	-.851	-1.064	-1.135	-1.064	-.963	-.617	-1.085	-1.165	-1.070	-1.047	-.885	-.547	-.851	-1.064	-1.135	-1.064	-.963	-.617	-1.085	-1.165	-1.070	-1.047	-.885																								
	30.00	-.566	-.477	-1.028	-1.113	-1.057	-.966	-.608	-.634	-1.146	-1.056	-1.037	-.882	-.566	-.477	-1.028	-1.113	-1.057	-.966	-.608	-.634	-1.146	-1.056	-1.037	-.882																								
	35.00	-.539	-.515	-1.012	-1.094	-1.047	-.963	-.599	-.586	-1.133	-1.042	-1.026	-.877	-.539	-.515	-1.012	-1.094	-1.047	-.963	-.599	-.586	-1.133	-1.042	-1.026	-.877																								
	40.00	-.546	-.537	-.998	-1.077	-1.033	-.962	-.615	-.593	-1.120	-1.027	-1.017	-.882	-.546	-.537	-.998	-1.077	-1.033	-.962	-.615	-.593	-1.120	-1.027	-1.017	-.882																								
	45.00	-.542	-.548	-.991	-1.063	-1.024	-.957	-.596	-.608	-1.110	-1.006	-1.012	-.876	-.542	-.548	-.991	-1.063	-1.024	-.957	-.596	-.608	-1.110	-1.006	-1.012	-.876																								
	50.00	-.572	-.562	-.984	-1.049	-1.011	-.951	-.618	-.620	-1.106	-.989	-1.000	-.873	-.572	-.562	-.984	-1.049	-1.011	-.951	-.618	-.620	-1.106	-.989	-1.000	-.873																								
	55.00	-.593	-.587	-.956	-1.030	-.997	-.942	-.645	-.642	-1.091	-.974	-.988	-.873	-.593	-.587	-.956	-1.030	-.997	-.942	-.645	-.642	-1.091	-.974	-.988	-.873																								
60.00	-.609	-.608	-.904	-1.002	-.977	-.930	-.665	-.664	-1.047	-.953	-.975	-.869	-.609	-.608	-.904	-1.002	-.977	-.930	-.665	-.664	-1.047	-.953	-.975	-.869																									
65.00	-.617	-.617	-.802	-.988	-.958	-.922	-.673	-.673	-.932	-.941	-.953	-.861	-.617	-.617	-.802	-.988	-.958	-.922	-.673	-.673	-.932	-.941	-.953	-.861																									
70.00	-.604	-.625	-.657	-.970	-.940	-.918	-.681	-.681	-.725	-.930	-.937	-.860	-.604	-.625	-.657	-.970	-.940	-.918	-.681	-.681	-.725	-.930	-.937	-.860																									
75.00	-.593	-.633	-.582	-.939	-.921	-.918	-.637	-.686	-.591	-.915	-.922	-.862	-.593	-.633	-.582	-.939	-.921	-.918	-.637	-.686	-.591	-.915	-.922	-.862																									
80.00	-.641	-.652	-.572	-.903	-.901	-.918	-.682	-.681	-.582	-.907	-.905	-.859	-.641	-.652	-.572	-.903	-.901	-.918	-.682	-.681	-.582	-.907	-.905	-.859																									
85.00	-.645	-.649	-.587	-.875	-.868	-.921	-.676	-.643	-.617	-.896	-.881	-.856	-.645	-.649	-.587	-.875	-.868	-.921	-.676	-.643	-.617	-.896	-.881	-.856																									
90.00	-.626	-.645	-.578	-.820	-.835	-.926	-.635	-.619	-.635	-.881	-.853	-.859	-.626	-.645	-.578	-.820	-.835	-.926	-.635	-.619	-.635	-.881	-.853	-.859																									
95.00	-.553	-.552	-.571	-.765	-.836	-.924	-.466	-.557	-.655	-.871	-.864	-.859	-.553	-.552	-.571	-.765	-.836	-.924	-.466	-.557	-.655	-.871	-.864	-.859																									
Lower surface	1.25	1.001	.927	.848	.791	.738	.659	1.027	.949	.859	.791	.731	.658	1.001	.927	.848	.791	.738	.659	1.027	.949	.859	.791	.731	.658																								
	2.50	1.034	.875	.826	.783	.750	.640	1.082	.923	.858	.806	.771	.654	1.034	.875	.826	.783	.750	.640	1.082	.923	.858	.806	.771	.654																								
	5.00	.948	.808	.763	.726	.705	.619	.991	.858	.805	.766	.744	.644	.948	.808	.763	.726	.705	.619	.991	.858	.805	.766	.744	.644																								
	7.50	.848	.735	.708	.679	.665	.577	.903	.796	.758	.721	.713	.610	.848	.735	.708	.679	.665	.577	.903	.796	.758	.721	.713	.610																								
	10.00	.780	.693	.672	.643	.622	.534	.830	.751	.718	.689	.674	.570	.780	.693	.672	.643	.622	.534	.830	.751	.718	.689	.674	.570																								
	15.00	.684	.625	.603	.579	.560	.453	.741	.681	.657	.626	.610	.497	.684	.625	.603	.579	.560	.453	.741	.681	.657	.626	.610	.497																								
	20.00	.614	.590	.546	.519	.507	.383	.666	.629	.598	.569	.558	.427	.614	.590	.546	.519	.507	.383	.666	.629	.598	.569	.558	.427																								
	25.00	.567	.529	.502	.474	.462	.312	.619	.586	.553	.525	.517	.364	.567	.529	.502	.474	.462	.312	.619	.586	.553	.525	.517	.364																								
	30.00	.523	.481	.460	.439	.421	.254	.575	.540	.514	.489	.475	.299	.523	.481	.460	.439	.421	.254	.575	.540	.514	.489	.475	.299																								
	35.00	.433	.442	.397	.377	.377	.221	.488	.493	.473	.444	.432	.267	.433	.442	.397	.377	.377	.221	.488	.493	.473	.444	.432	.267																								
	40.00	.433	.407	.386	.361	.349	.154	.483	.458	.439	.410	.402	.203	.433	.407	.386	.361	.349	.154	.483	.458	.439	.410	.402	.203																								
	45.00	.411	.371	.350	.322	.310	.092	.462	.422	.402	.371	.365	.140	.411	.371	.350	.322	.310	.092	.462	.422	.402	.371	.365	.140																								
	50.00	.347	.332	.316	.291	.275	.060	.396	.382	.367	.336	.328	.108	.347	.332	.316	.291	.275	.060	.396	.382	.367	.336	.328	.108																								
	55.00	.303	.299	.292	.267	.229	.032	.354	.351	.339	.312	.284	.078	.303	.299	.292	.267	.229	.032	.354	.351	.339	.312	.284	.078																								
	60.00	.306	.274	.256	.234	.196	.004	.348	.319	.306	.278	.247	.052	.306	.274	.256	.234	.196	.004	.348	.319	.306	.278	.247	.052																								
	65.00	.259	.246	.233	.204	.161	-.021	.302	.288	.278	.246	.214	.028	.259	.246	.233	.204	.161	-.021	.302	.288	.278	.246	.214	.028																								
70.00	.216	.230	.214	.187	.155	-.042	.255	.272	.255	.230	.204	.004	.216	.230	.214	.187	.155	-.042	.255	.272	.255	.230	.204	.004																									
75.00	.198	.201	.184	.159	.128	-.053	.237	.234	.226	.201	.172	-.009	.198	.201	.184	.159	.128	-.053	.237	.234	.226	.201	.172	-.009																									
80.00	.174	.180	.165	.142	.107	-.071	.209	.214	.205	.181	.148	-.028	.174	.180	.165	.142	.107	-.071	.209	.214	.205	.181	.148	-.028																									
85.00	.144	.155	.154	.130	.084	-.037	.169	.190	.186	.161	.124	-.013	.144	.155	.154	.130	.084	-.037	.169	.190	.186	.161	.124	-.013																									
90.00	.118	.130	.126	.109	.068	-.084	.139	.160	.154	.134	.099	-.058	.118	.130	.126	.109	.068	-.084	.139	.160	.154	.134	.099	-.058																									
95.00	.081	.087	.088	.053	.033	-.078	.095	.109	.109	.071	.055	-.057	.081	.087	.088	.053	.033	-.078	.095	.109	.109	.071	.055	-.057																									
Upper surface	0.00	-.121	-.786	-.980	-1.113	-1.091	-.909	-.211	-.935	-1.112	-1.084	-.988	-.932	-.121	-.786	-.980	-1.113	-1.091	-.909	-.211	-.935	-1.112	-1.084	-.988	-.932																								
	1.25	-.902	-1.289	-1.248	-1.080	-.989	-.880	-1.009	-1.284	-1.233	-1.062	-.983	-.915	-.902	-1.289	-1.248	-1.080	-.989	-.880	-1.009	-1.284	-1.233	-1.062	-.983	-.915																								
	2.50	-1.111	-1.276	-1.214	-1.083	-.991	-.878	-1.102	-1.267	-1.218	-1.063	-.979	-.916	-1.111	-1.276	-1.214	-1.083	-.991	-.878	-1.102	-1.267	-1.218	-1.063	-.979	-.916																								
	5.00	-1.086	-1.273	-1.239	-1.081	-.995	-.874	-1.158	-1.264	-1.238	-1.058	-.980	-.914	-1.086	-1.273	-1.239	-1.081	-.995	-.874	-1.158	-1.264	-1.238	-1.058	-.980	-.914																								
	7.50	-1.053	-1.270	-1.204	-1.081	-.992	-.875	-1.128	-1.261	-1.202	-1.056	-.972	-.914	-1.053	-1.270	-1.204	-1.081	-.992	-.875	-1.128	-1.261	-1.202	-1.056	-.972	-.914																								
	10.00	-1.019	-1.257	-1.238	-1.080	-.995	-.875	-1.097	-1.255	-1.217	-1.056	-.973	-.915	-1.019	-1.257	-1.238	-1.080	-.995	-.875	-1.097	-1.255	-1.217	-1.056	-.973	-.915																								
	15.00	-.872	-1.222	-1.232	-1.073	-1.004	-.875	-.953	-1.241	-1.209	-1.051	-.976	-.916	-.872	-1.222	-1.232	-1.073	-1.004	-.875	-.953	-1.241	-1.209	-1.051	-.976	-.916																								

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
 RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

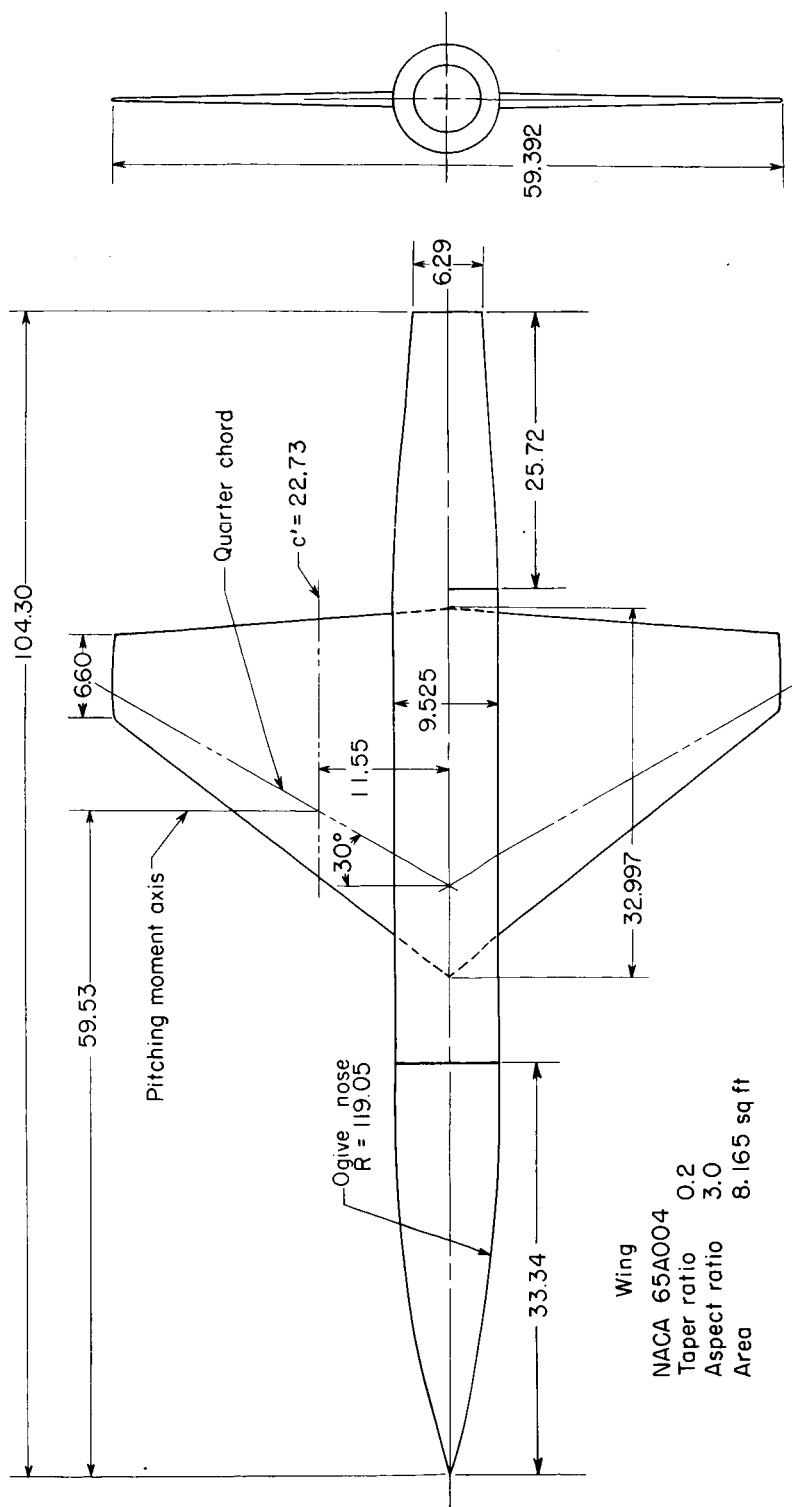
		Pressure coefficient at:																																																					
		0.16b/2						0.25b/2						0.40b/2						0.60b/2						0.75b/2						0.95b/2																							
Percent c	M = 1.03	$\alpha = -2.02^\circ$														M = 1.03														$\alpha = -0.06^\circ$																									
Upper surface	0.00	-.019	.737	.695	.667	.616	.560	-.001	.758	.722	.725	.694	.739	-.001	.758	.722	.725	.694	.739	-.001	.758	.722	.725	.694	.739																														
	1.25	.312	.245	.281	.303	.296	.357	.222	.065	.088	.064	.039	.147	.222	.065	.088	.064	.039	.147	.222	.065	.088	.064	.039	.147																														
	2.50	.262	.173	.190	.204	.220	.234	.164	.025	.029	.013	-.001	-.043	.164	.025	.029	.013	-.001	-.043	.164	.025	.029	.013	-.001	-.043																														
	5.00	.212	.148	.143	.147	.146	.195	.108	.025	.034	.005	-.026	-.051	.108	.025	.034	.005	-.026	-.051	.108	.025	.034	.005	-.026	-.051																														
	7.50	.185	.120	.107	.103	.102	.153	.088	.025	.012	-.016	-.052	-.059	.088	.025	.012	-.016	-.052	-.059	.088	.025	.012	-.016	-.052	-.059																														
	10.00	.158	.095	.078	.077	.072	.112	.067	.015	-.005	-.038	-.053	-.078	.067	.015	-.005	-.038	-.053	-.078	.067	.015	-.005	-.038	-.053	-.078																														
	15.00	.121	.066	.046	.045	.039	.044	.050	.000	-.030	-.044	-.076	-.100	.050	.000	-.030	-.044	-.076	-.100	.050	.000	-.030	-.044	-.076	-.100																														
	20.00	.056	.037	.015	.013	.011	-.023	.007	.027	-.059	-.068	-.095	-.114	.007	.027	-.059	-.068	-.095	-.114	.007	.027	-.059	-.068	-.095	-.114																														
	25.00	.055	.027	.003	.007	-.009	-.122	-.008	.042	.057	.085	-.111	-.195	-.008	.042	.057	.085	-.111	-.195	-.008	.042	.057	.085	-.111	-.195																														
	30.00	.023	.011	-.012	-.025	-.023	-.153	-.031	-.051	-.073	-.100	-.121	-.201	-.031	-.051	-.073	-.100	-.121	-.201	-.031	-.051	-.073	-.100	-.121	-.201																														
	35.00	-.001	-.022	-.032	-.036	-.051	-.176	-.055	-.076	-.094	-.116	-.145	-.201	-.055	-.076	-.094	-.116	-.145	-.201	-.055	-.076	-.094	-.116	-.145	-.201																														
	40.00	-.039	-.033	-.049	-.063	-.067	-.239	-.086	-.098	-.117	-.146	-.163	-.251	-.086	-.098	-.117	-.146	-.163	-.251	-.086	-.098	-.117	-.146	-.163	-.251																														
	45.00	-.016	-.033	-.058	-.080	-.095	-.239	-.086	-.109	-.132	-.158	-.185	-.239	-.086	-.109	-.132	-.158	-.185	-.239	-.086	-.109	-.132	-.158	-.185	-.239																														
	50.00	-.027	-.042	-.081	-.098	-.127	-.269	-.065	-.097	-.137	-.177	-.210	-.265	-.065	-.097	-.137	-.177	-.210	-.265	-.065	-.097	-.137	-.177	-.210	-.265																														
55.00	-.042	-.082	-.109	-.127	-.150	-.279	-.089	-.124	-.162	-.189	-.231	-.276	-.089	-.124	-.162	-.189	-.231	-.276	-.089	-.124	-.162	-.189	-.231	-.276																															
60.00	.088	.108	.125	.144	.174	.263	.132	.159	.180	.202	.246	.264	.132	.159	.180	.202	.246	.264	.132	.159	.180	.202	.246	.264																															
65.00	.090	.103	.128	.158	.178	.285	.138	.155	.187	.216	.237	.288	.138	.155	.187	.216	.237	.288	.138	.155	.187	.216	.237	.288																															
70.00	.092	.109	.129	.159	.212	.288	.144	.161	.188	.222	.255	.296	.144	.161	.188	.222	.255	.296	.144	.161	.188	.222	.255	.296																															
75.00	.098	.116	.140	.159	.223	.273	.152	.168	.194	.227	.267	.301	.152	.168	.194	.227	.267	.301	.152	.168	.194	.227	.267	.301																															
80.00	.129	.128	.137	.160	.236	.243	.180	.184	.195	.224	.280	.269	.180	.184	.195	.224	.280	.269	.180	.184	.195	.224	.280	.269																															
85.00	.138	.116	.134	.162	.230	.243	.201	.182	.195	.219	.263	.247	.201	.182	.195	.219	.263	.247	.201	.182	.195	.219	.263	.247																															
90.00	.103	.109	.116	.161	.209	.227	.165	.179	.185	.210	.242	.230	.165	.179	.185	.210	.242	.230	.165	.179	.185	.210	.242	.230																															
95.00	-.077	-.107	-.112	-.152	-.220	-.236	-.130	-.174	-.180	-.201	-.249	-.235	-.130	-.174	-.180	-.201	-.249	-.235	-.130	-.174	-.180	-.201	-.249	-.235																															
Lower surface	1.25	.086	-.180	-.428	-.587	-.741	-.787	.192	.067	.017	-.008	-.027	-.080	.192	.067	.017	-.008	-.027	-.080	.192	.067	.017	-.008	-.027	-.080																														
	2.50	.019	-.156	-.189	-.182	-.618	-.722	.131	.012	.002	-.031	-.060	-.073	.131	.012	.002	-.031	-.060	-.073	.131	.012	.002	-.031	-.060	-.073																														
	5.00	-.007	-.093	-.147	-.183	-.454	-.646	.098	.033	.008	-.014	-.042	-.082	.098	.033	.008	-.014	-.042	-.082	.098	.033	.008	-.014	-.042	-.082																														
	7.50	-.022	-.101	-.158	-.205	-.263	-.593	.074	.007	-.017	-.038	-.052	-.097	.074	.007	-.017	-.038	-.052	-.097	.074	.007	-.017	-.038	-.052	-.097																														
	10.00	-.050	-.111	-.156	-.223	-.250	-.540	.044	-.009	-.036	-.056	-.063	-.096	.044	-.009	-.036	-.056	-.063	-.096	.044	-.009	-.036	-.056	-.063	-.096																														
	15.00	-.066	-.107	-.150	-.210	-.239	-.419	-.024	-.009	-.046	-.063	-.070	-.103	-.024	-.009	-.046	-.063	-.070	-.103	-.024	-.009	-.046	-.063	-.070	-.103																														
	20.00	-.083	-.112	-.169	-.234	-.269	-.319	-.001	-.040	-.061	-.096	-.107	-.139	-.001	-.040	-.061	-.096	-.107	-.139	-.001	-.040	-.061	-.096	-.107	-.139																														
	25.00	-.105	-.111	-.149	-.198	-.243	-.306	.013	-.030	-.057	-.091	-.111	-.184	.013	-.030	-.057	-.091	-.111	-.184	.013	-.030	-.057	-.091	-.111	-.184																														
	30.00	-.085	-.115	-.152	-.196	-.233	-.272	-.003	-.040	-.070	-.101	-.120	-.201	-.003	-.040	-.070	-.101	-.120	-.201	-.003	-.040	-.070	-.101	-.120	-.201																														
	35.00	-.100	-.141	-.172	-.214	-.247	-.213	.036	-.067	-.099	-.126	-.144	-.172	.036	-.067	-.099	-.126	-.144	-.172	.036	-.067	-.099	-.126	-.144	-.172																														
	40.00	-.147	-.169	-.187	-.233	-.254	-.237	-.073	-.095	-.114	-.145	-.157	-.213	-.073	-.095	-.114	-.145	-.157	-.213	-.073	-.095	-.114	-.145	-.157	-.213																														
	45.00	-.119	-.157	-.201	-.234	-.274	-.268	-.046	-.084	-.122	-.160	-.178	-.241	-.046	-.084	-.122	-.160	-.178	-.241	-.046	-.084	-.122	-.160	-.178	-.241																														
	50.00	-.158	-.206	-.232	-.281	-.328	-.307	-.093	-.114	-.149	-.182	-.195	-.263	-.093	-.114	-.149	-.182	-.195	-.263	-.093	-.114	-.149	-.182	-.195	-.263																														
	55.00	-.184	-.206	-.232	-.281	-.328	-.307	-.114	-.131	-.167	-.196	-.223	-.279	-.114	-.131	-.167	-.196	-.223	-.279	-.114	-.131	-.167	-.196	-.223	-.279																														
60.00	-.209	-.226	-.256	-.295	-.343	-.319	-.144	-.161	-.181	-.219	-.242	-.283	-.144	-.161	-.181	-.219	-.242	-.283	-.144	-.161	-.181	-.219	-.242	-.283																															
65.00	-.220	-.239	-.260	-.315	-.357	-.323	-.149	-.169	-.191	-.236	-.262	-.283	-.149	-.169	-.191	-.236	-.262	-.283	-.149	-.169	-.191	-.236	-.262	-.283																															
70.00	-.220	-.234	-.263	-.303	-.339	-.330	-.149	-.157	-.195	-.228	-.254	-.284	-.149	-.157	-.195	-.228	-.254	-.284	-.149	-.157	-.195	-.228	-.254	-.284																															
75.00	-.268	-.252	-.269	-.309	-.352	-.317	-.180	-.197	-.237	-.272	-.297	-.301	-.180	-.197	-.237	-.272	-.297	-.301	-.180	-.197	-.237	-.272	-.297	-.301																															
80.00	-.268	-.266	-.273	-.316	-.342	-.328	-.203	-.199	-.203	-.246	-.287	-.278	-.203	-.199	-.203	-.246	-.287	-.278	-.203	-.199	-.203	-.246	-.287	-.278																															
85.00	-.279	-.266	-.273	-.311	-.328	-.271	-.213	-.201	-.206	-.237	-.289	-.221	-.213	-.201	-.206	-.237	-.289	-.221	-.213	-.201	-.206	-.237	-.289	-.221																															
90.00	-.262	-.269	-.272	-.297	-.315	-.315	-.203	-.206	-.203	-.223	-.280	-.262	-.203	-.206	-.203	-.223	-.280	-.262	-.203	-.206	-.203	-.223	-.280	-.262																															
95.00	-.166	-.229	-.248	-.277	-.282	-.282	-.151	-.192	-.198	-.229	-.258	-.225	-.151	-.192	-.198	-.229	-.258	-.225	-.151	-.192	-.198	-.229	-.258	-.225																															
Upper surface	0.00	-.009	.722	.645	.666	.654	.727	-.025	.652	.540	.523	.514	.692	-.025	.652	.540	.523	.514	.692	-.025	.652	.540	.523	.514	.692																														
	1.25	.119	-.108	-.256	-.473	-.555	-.459	.036	-.685	-.779	-.841	-.877	-.685	.036	-.685	-.779	-.841	-.877	-.685	.036	-.685	-.779	-.841	-.877	-.685																														
	2.50	.058	-.158	-.184	-.329	-.476	-.628	-.142	-.314	-.607	-.693	-.750	-.801	-.142	-.314	-.607	-.693	-.750	-.801	-.142	-.314	-.607	-.693	-.750	-.801																														
	5.00	-.008	-.125	-.138	-.190	-.321	-.575	-.149	-.205	-.286	-.653	-.709	-.789	-.149	-.205	-.286	-.653	-.709	-.789	-.149	-.205	-.286	-.653	-.709	-.789																														
	7.50	-.025	-.090	-.130	-.191	-.241	-.424	-.155	-.192	-.226	-.627	-.681	-.761	-.155	-.192	-.226	-.627	-.681	-.761	-.155	-.192	-.226	-.627	-.681	-.761																														
	10.00	-.041	-.084	-.136	-.190	-.234	-.490	-.113	-.176	-.225	-.423	-.663	-.746	-.113	-.176	-.225	-.423	-.663	-.746	-.113	-.176	-.225	-.423	-.663	-.746																														
	15.00	-.047	-.110	-.158	-.200	-.250	-.293	-.106	-.183	-.242	-.258	-.646	-.725	-.106	-.183	-.242	-.258	-.646	-.725	-.106	-.183	-.242	-.2																																

TABLE I. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
 RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Continued

Pressure coefficient at:															
		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2			0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2
	Percent c	M = 1.03 α = 5.95°						M = 1.03 α = 7.92°							
Upper surface	0.00	-.093	+.495	+.399	+.342	+.290	+.601		-.058	+.386	+.236	+.128	+.031	+.448	
	1.25	-.100	-.948	-.968	-1.008	-1.036	-.834		-.136	-1.030	-1.081	-1.113	-1.123	-.963	
	2.50	-.182	-.891	-.873	-.932	-.976	-1.049		-.222	-.946	-.994	-1.051	-1.072	-1.134	
	5.00	-.313	-.625	-.808	-.855	-.908	-.993		-.367	-.716	-.932	-.932	-1.012	-1.079	
	7.50	-.314	-.352	-.746	-.813	-.862	-.927		-.357	-.519	-.871	-.933	-.966	-1.031	
	10.00	-.315	-.338	-.716	-.791	-.838	-.900		-.347	-.386	-.846	-.906	-.942	-1.005	
	15.00	-.241	-.314	-.350	-.730	-.814	-.874		-.253	-.338	-.777	-.852	-.916	-.977	
	20.00	-.223	-.304	-.296	-.697	-.782	-.851		-.217	-.310	-.488	-.818	-.885	-.953	
	25.00	-.279	-.303	-.290	-.673	-.747	-.845		-.265	-.299	-.401	-.799	-.847	-.935	
	30.00	-.336	-.306	-.287	-.453	-.728	-.799		-.318	-.299	-.355	-.767	-.832	-.900	
	35.00	-.296	-.334	-.294	-.367	-.721	-.723		-.277	-.316	-.346	-.734	-.824	-.823	
	40.00	-.331	-.344	-.310	-.349	-.714	-.744		-.315	-.329	-.357	-.565	-.815	-.838	
Lower surface	45.00	-.338	-.347	-.325	-.349	-.704	-.709		-.314	-.328	-.370	-.509	-.815	-.805	
	50.00	-.311	-.348	-.331	-.361	-.578	-.713		-.290	-.330	-.380	-.487	-.809	-.813	
	55.00	-.323	-.369	-.342	-.380	-.497	-.716		-.303	-.345	-.389	-.473	-.807	-.814	
	60.00	-.370	-.394	-.354	-.387	-.464	-.705		-.346	-.361	-.400	-.460	-.803	-.807	
	65.00	-.371	-.389	-.352	-.399	-.444	-.714		-.345	-.368	-.399	-.456	-.706	-.811	
	70.00	-.376	-.385	-.354	-.397	-.445	-.714		-.345	-.379	-.399	-.453	-.625	-.819	
	75.00	-.373	-.391	-.361	-.397	-.445	-.716		-.342	-.367	-.405	-.452	-.587	-.823	
	80.00	-.401	-.402	-.356	-.395	-.449	-.712		-.366	-.375	-.401	-.451	-.566	-.821	
	85.00	-.414	-.403	-.353	-.395	-.435	-.701		-.377	-.375	-.400	-.451	-.513	-.815	
	90.00	-.385	-.398	-.340	-.386	-.381	-.704		-.355	-.375	-.385	-.443	-.425	-.822	
	95.00	-.271	-.369	-.334	-.367	-.324	-.710		-.256	-.364	-.383	-.426	-.333	-.833	
	Upper surface	1.25	.535	.562	.593	.619	.642	.555		.705	.714	.687	.693	.703	.611
2.50		.518	.451	.511	.532	.545	.490		.696	.614	.613	.618	.621	.548	
5.00		.472	.383	.435	.440	.453	.433		.638	.535	.528	.525	.532	.489	
7.50		.413	.327	.377	.384	.395	.363		.575	.476	.471	.466	.472	.427	
10.00		.361	.298	.345	.347	.345	.316		.511	.442	.436	.426	.421	.375	
15.00		.300	.249	.294	.297	.286	.225		.441	.381	.373	.368	.359	.284	
20.00		.250	.229	.249	.236	.240	.145		.383	.360	.325	.306	.309	.204	
25.00		.216	.187	.221	.205	.203	.078		.352	.313	.291	.270	.270	.141	
30.00		.195	.152	.194	.180	.172	.016		.317	.276	.260	.242	.235	.074	
35.00		.109	.124	.159	.144	.133	.010		.227	.245	.225	.203	.193	.059	
40.00		.121	.105	.139	.119	.110	-.066		.243	.221	.199	.172	.171	-.015	
45.00		.124	.072	.106	.087	.076	-.124		.235	.186	.166	.136	.131	-.075	
Lower surface	50.00	.057	.037	.080	.057	.044	-.153		.170	.149	.135	.109	.100	-.105	
	55.00	.021	.012	.063	.041	.004	-.182		.136	.127	.118	.091	.061	-.136	
	60.00	.025	-.006	.041	.018	-.022	-.197		.138	.106	.091	.066	.028	-.154	
	65.00	-.004	-.023	.026	-.002	-.051	-.215		.106	.085	.078	.043	-.003	-.186	
	70.00	-.025	-.027	.021	-.006	-.052	-.230		.075	.079	.064	.032	-.009	-.190	
	75.00	-.039	-.056	-.004	-.034	-.089	-.228		.065	.052	.041	.004	-.042	-.190	
	80.00	-.054	-.063	-.013	-.050	-.109	-.238		.048	.041	.031	-.004	-.056	-.208	
	85.00	-.075	-.067	-.013	-.050	-.120	-.192		.028	.036	.031	-.004	-.068	-.165	
	90.00	-.082	-.073	-.014	-.048	-.120	-.238		.022	.030	.031	-.002	-.061	-.212	
	95.00	-.066	-.081	-.019	-.062	-.111	-.210		.024	.017	.018	-.022	-.057	-.182	
	Upper surface		M = 1.03 α = 9.89°						M = 1.03 α = 13.68°						
		0.00	-.091	+.206	+.044	-.108	-.270	+.239		-.121	-.159	-.406	-.598	-.760	-.290
1.25		-.260	-1.136	-1.163	-1.165	-1.183	-1.074		-.483	-1.133	-1.087	-1.046	-1.065	-1.102	
2.50		-.358	-1.068	-1.084	-1.136	-1.155	-1.198		-.594	-1.092	-1.073	-1.052	-1.044	-1.120	
5.00		-.513	-.888	-1.036	-1.072	-1.109	-1.161		-.721	-1.053	-1.096	-1.036	-1.048	-1.114	
7.50		-.496	-.696	-.974	-1.028	-1.058	-1.128		-.680	-.996	-1.044	-1.040	-1.043	-1.101	
10.00		-.479	-.611	-.958	-1.003	-1.038	-1.101		-.640	-.951	-1.021	-1.038	-1.008	-1.101	
15.00		-.359	-.518	-.898	-.946	-1.012	-1.068		-.496	-.880	-.963	-1.008	-1.024	-1.091	
20.00		-.302	-.463	-.703	-.911	-.982	-1.046		-.421	-.805	-.907	-.962	-1.020	-1.080	
25.00		-.332	-.426	-.578	-.896	-.943	-1.028		-.415	-.537	-.860	-.958	-.997	-1.056	
30.00		-.373	-.387	-.532	-.872	-.929	-1.001		-.438	-.344	-.828	-.922	-.978	-1.028	
35.00		-.333	-.371	-.478	-.857	-.921	-.922		-.412	-.395	-.810	-.902	-.960	-.975	
Lower surface	40.00	-.364	-.371	-.430	-.808	-.912	-.924		-.427	-.420	-.794	-.882	-.941	-.991	
	45.00	-.369	-.371	-.414	-.661	-.912	-.899		-.435	-.435	-.774	-.868	-.934	-.959	
	50.00	-.355	-.373	-.419	-.626	-.909	-.909		-.444	-.447	-.748	-.858	-.918	-.950	
	55.00	-.366	-.391	-.431	-.620	-.909	-.908		-.456	-.465	-.715	-.846	-.902	-.944	
	60.00	-.405	-.419	-.442	-.603	-.910	-.903		-.483	-.494	-.672	-.827	-.883	-.931	
	65.00	-.407	-.417	-.440	-.590	-.897	-.908		-.488	-.500	-.607	-.812	-.839	-.903	
	70.00	-.407	-.418	-.445	-.577	-.861	-.914		-.498	-.504	-.543	-.803	-.798	-.889	
	75.00	-.399	-.424	-.454	-.557	-.745	-.922		-.487	-.508	-.508	-.808	-.752	-.895	
	80.00	-.424	-.437	-.454	-.540	-.644	-.922		-.521	-.525	-.500	-.793	-.714	-.885	
	85.00	-.441	-.438	-.454	-.527	-.559	-.922		-.530	-.530	-.505	-.777	-.666	-.877	
	90.00	-.424	-.438	-.443	-.505	-.507	-.927		-.518	-.530	-.504	-.657	-.616	-.907	
	95.00	-.325	-.426	-.443	-.472	-.467	-.946		-.443	-.499	-.510	-.548	-.597	-.908	

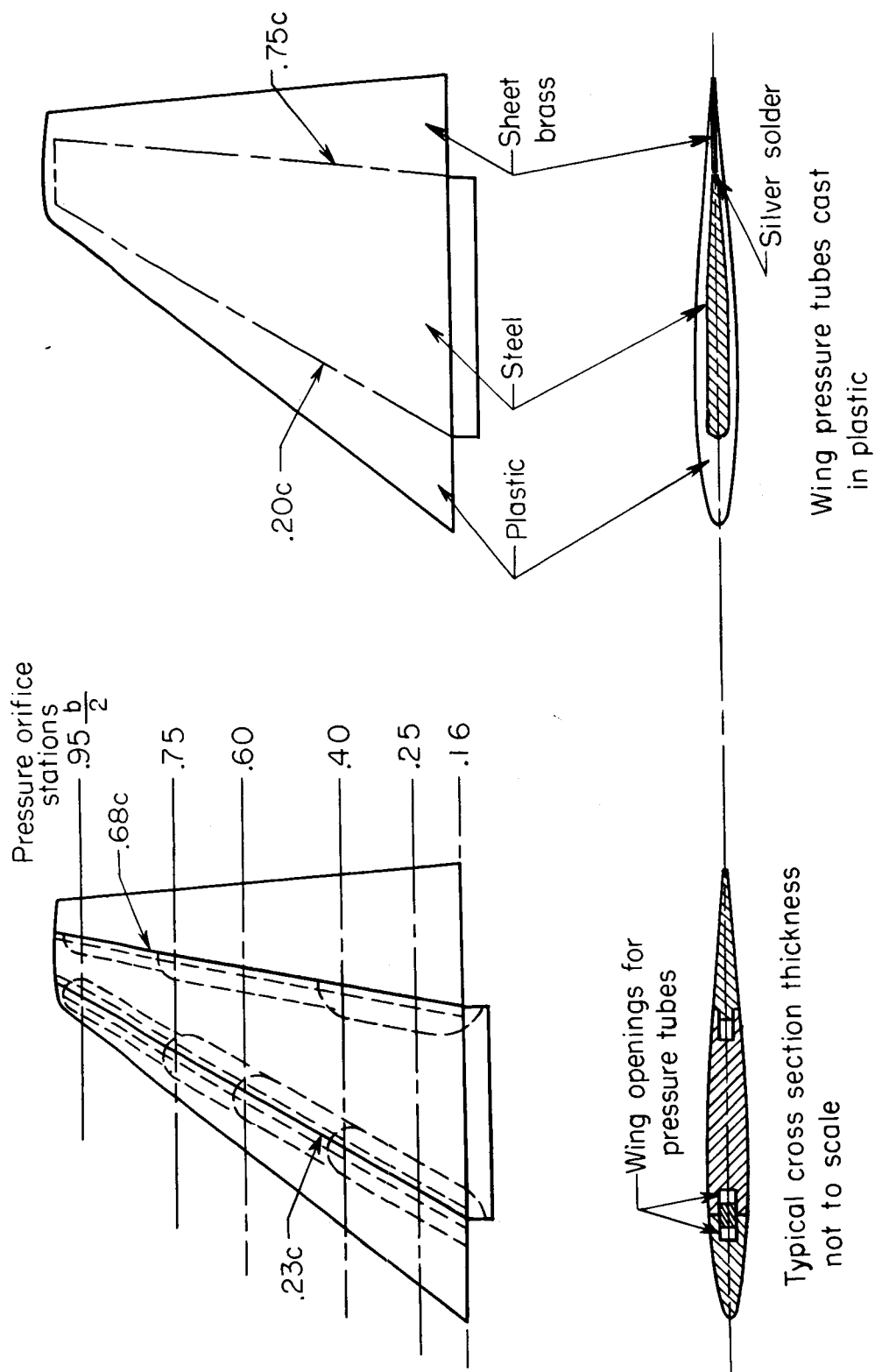
TABLE 1. - STEEL WING PRESSURE COEFFICIENT DATA FOR THE TEST
 RANGE OF ANGLE OF ATTACK AND MACH NUMBER - Concluded

		Pressure coefficient at:												
		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2		0.16b/2	0.25b/2	0.40b/2	0.60b/2	0.75b/2	0.95b/2
	Percent c	M = 1.03 α = 15.85°							M = 1.03 α = 17.97°					
Upper surface	0.00	-.152	-.378	-.588	-.818	-.932	-.599		-.172	-.559	-.765	-.965	-1.062	-.830
	1.25	-.604	-1.188	-1.129	-1.072	-1.003	-.918		-.709	-1.245	-1.193	-1.047	-.973	-.870
	2.50	-.715	-1.179	-1.108	-1.076	-1.003	-.909		-.833	-1.233	-1.166	-1.042	-.973	-.866
	5.00	-.827	-1.144	-1.132	-1.068	-1.002	-.901		-.936	-1.213	-1.196	-1.037	-.979	-.861
	7.50	-.794	-1.107	-1.107	-1.072	-.990	-.894		-.952	-1.203	-1.162	-1.036	-.977	-.861
	10.00	-.761	-1.064	-1.103	-1.080	-.985	-.894		-.868	-1.176	-1.190	-1.033	-.989	-.860
	15.00	-.602	-1.016	-1.064	-1.073	-.992	-.894		-.733	-1.115	-1.158	-1.026	-1.002	-.859
	20.00	-.517	-.977	-1.023	-1.049	-.990	-.894		-.618	-1.073	-1.125	-1.018	-1.007	-.856
	25.00	-.493	-.743	-.984	-1.049	-.981	-.891		-.561	-1.021	-1.098	-1.015	-1.004	-.853
	30.00	-.506	-.619	-.956	-1.022	-.976	-.889		-.565	-.573	-1.074	-1.003	-.994	-.851
	35.00	-.476	-.454	-.939	-1.005	-.970	-.884		-.545	-.529	-1.061	-.995	-.984	-.850
	40.00	-.486	-.478	-.929	-.992	-.960	-.888		-.552	-.544	-1.048	-.981	-.977	-.849
	45.00	-.497	-.493	-.920	-.977	-.953	-.879		-.553	-.560	-1.039	-.965	-.971	-.844
	50.00	-.513	-.505	-.909	-.966	-.940	-.872		-.574	-.571	-1.035	-.950	-.959	-.841
	55.00	-.528	-.527	-.883	-.953	-.926	-.866		-.587	-.592	-1.025	-.935	-.948	-.837
	60.00	-.551	-.552	-.830	-.927	-.914	-.858		-.607	-.615	-.999	-.913	-.934	-.835
	65.00	-.555	-.561	-.721	-.910	-.896	-.847		-.613	-.620	-.911	-.899	-.914	-.828
	70.00	-.553	-.566	-.580	-.894	-.872	-.843		-.601	-.624	-.703	-.886	-.896	-.828
75.00	-.542	-.573	-.517	-.873	-.855	-.843		-.594	-.632	-.509	-.866	-.880	-.828	
80.00	-.587	-.585	-.513	-.844	-.839	-.843		-.625	-.643	-.466	-.855	-.866	-.825	
85.00	-.593	-.589	-.526	-.812	-.804	-.843		-.641	-.621	-.517	-.843	-.839	-.824	
90.00	-.579	-.587	-.522	-.754	-.772	-.852		-.618	-.575	-.549	-.827	-.811	-.826	
95.00	-.507	-.509	-.518	-.696	-.773	-.851		-.431	-.484	-.580	-.813	-.820	-.826	
Lower surface	1.25	1.013	.950	.876	.822	.769	.688		1.047	.974	.882	.818	.755	.682
	2.50	1.048	.908	.855	.815	.781	.674		1.103	.943	.882	.836	.792	.678
	5.00	.967	.830	.795	.761	.741	.650		1.019	.885	.832	.798	.768	.670
	7.50	.877	.767	.742	.713	.698	.609		.928	.823	.785	.754	.735	.635
	10.00	.804	.727	.706	.677	.655	.566		.861	.778	.746	.718	.699	.596
	15.00	.720	.660	.638	.613	.599	.487		.772	.710	.685	.657	.634	.525
	20.00	.645	.619	.591	.556	.543	.418		.697	.660	.626	.599	.584	.456
	25.00	.595	.559	.537	.515	.500	.355		.647	.617	.577	.559	.541	.396
	30.00	.557	.514	.497	.480	.463	.292		.604	.567	.543	.525	.501	.329
	35.00	.462	.475	.457	.437	.417	.259		.515	.526	.503	.483	.459	.299
	40.00	.465	.444	.425	.402	.388	.195		.515	.489	.469	.443	.429	.236
	45.00	.448	.404	.390	.363	.352	.136		.494	.455	.434	.407	.393	.176
	50.00	.380	.366	.354	.330	.318	.102		.431	.412	.398	.374	.358	.142
	55.00	.342	.334	.331	.308	.278	.074		.388	.382	.370	.352	.314	.114
	60.00	.339	.309	.297	.279	.242	.047		.382	.352	.337	.320	.277	.089
	65.00	.295	.280	.278	.247	.205	.022		.339	.319	.313	.286	.245	.062
	70.00	.250	.264	.255	.232	.200	.003		.289	.306	.291	.271	.236	.037
	75.00	.237	.233	.229	.210	.170	-.009		.271	.269	.264	.242	.204	.025
80.00	.209	.214	.210	.191	.153	-.022		.246	.248	.241	.222	.179	.006	
85.00	.175	.197	.197	.179	.133	.004		.207	.229	.225	.203	.156	.023	
90.00	.151	.173	.170	.156	.115	-.041		.178	.199	.192	.178	.134	-.021	
95.00	.110	.126	.135	.105	.081	-.032		.125	.150	.150	.118	.092	-.019	



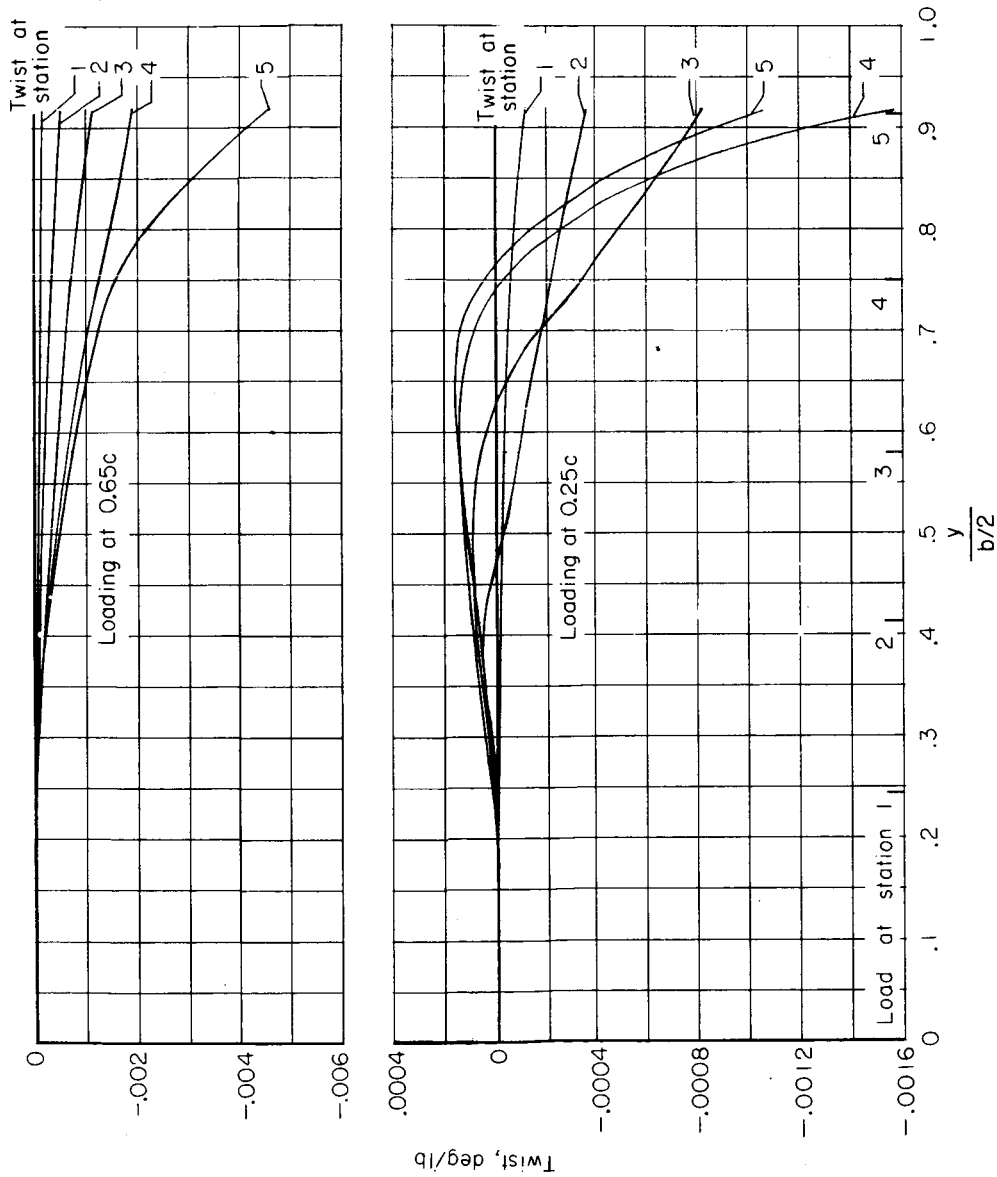
(a) Complete model.

Figure 1.- General model arrangement. All dimensions in inches.



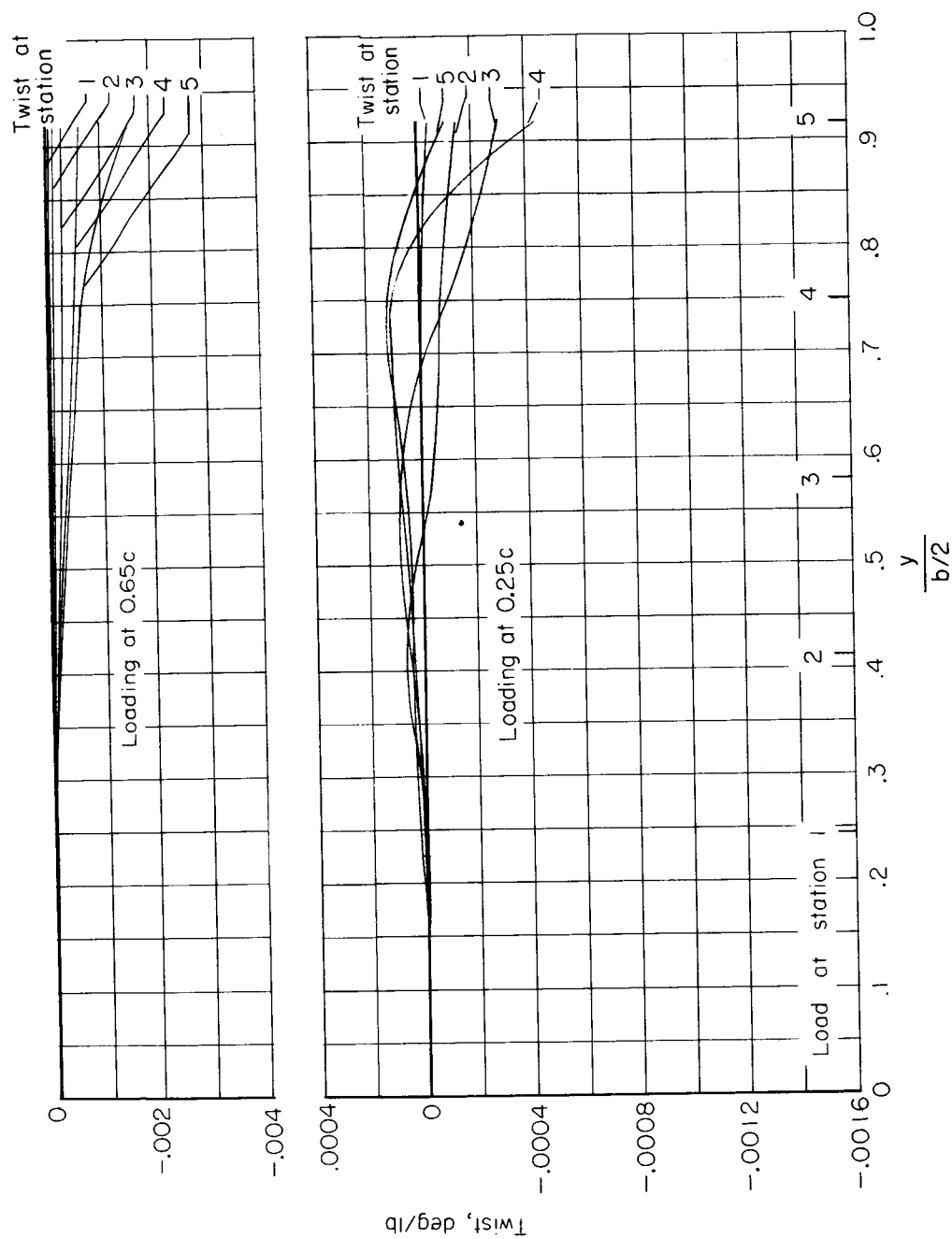
(b) Wings.

Figure 1.- Concluded.



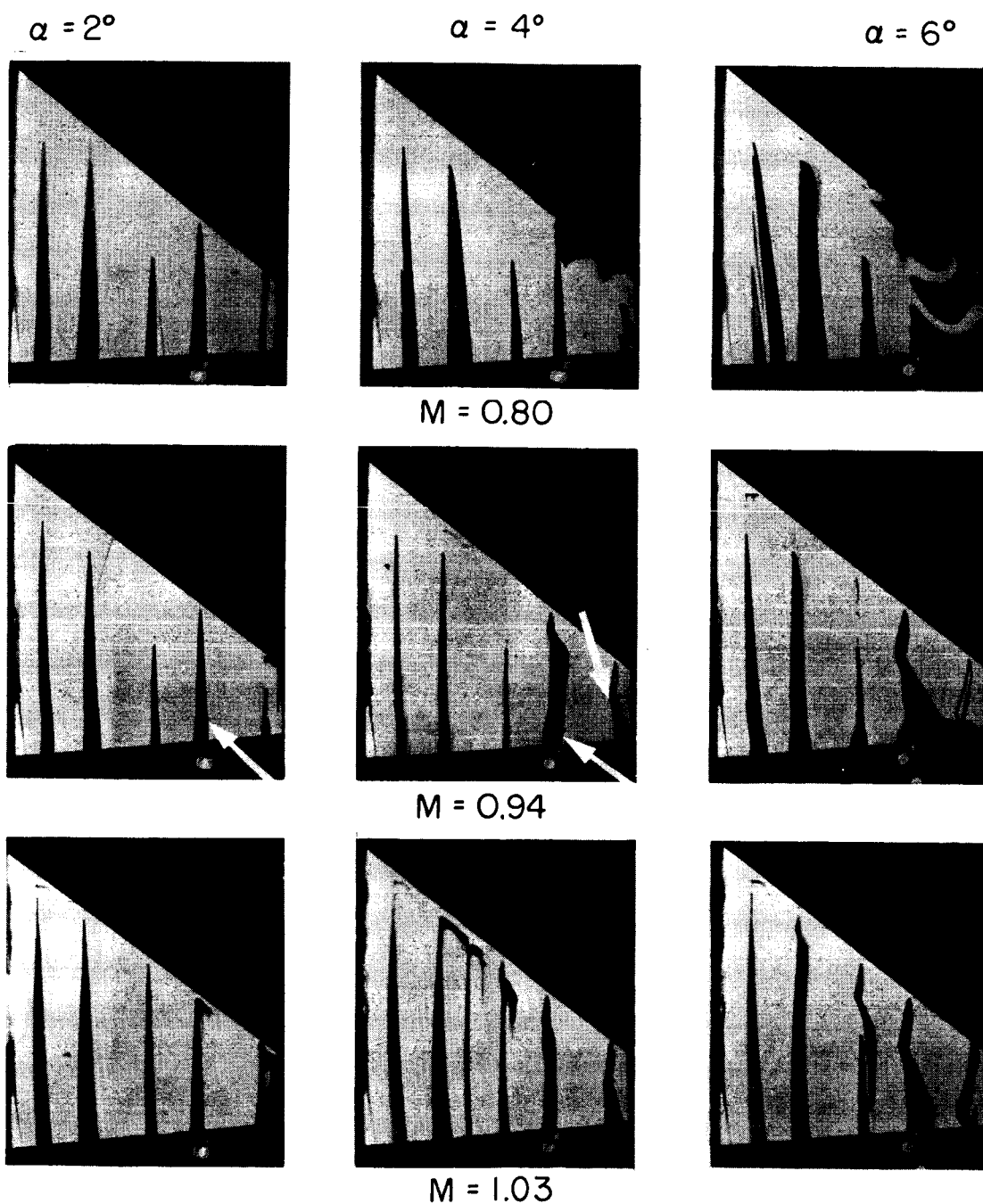
(a) Plastic wing.

Figure 2.- Wing elastic characteristics obtained experimentally, from which the influence coefficients were determined for twist in the angle-of-attack plane about 0.25c.



(b) Steel wing.

Figure 2.- Concluded.



(a) $\alpha = 2^\circ$ to 6° .

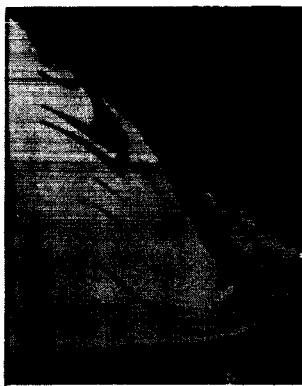
L-57-1639

Figure 3.- Typical flow study photographs for a range of Mach number and angle of attack, plastic wing.

$\alpha = 8^\circ$  $\alpha = 10^\circ$  $\alpha = 13^\circ$  $M = 0.80$  $M = 0.94$  $M = 1.03$ (b) $\alpha = 8^\circ$ to 13° .

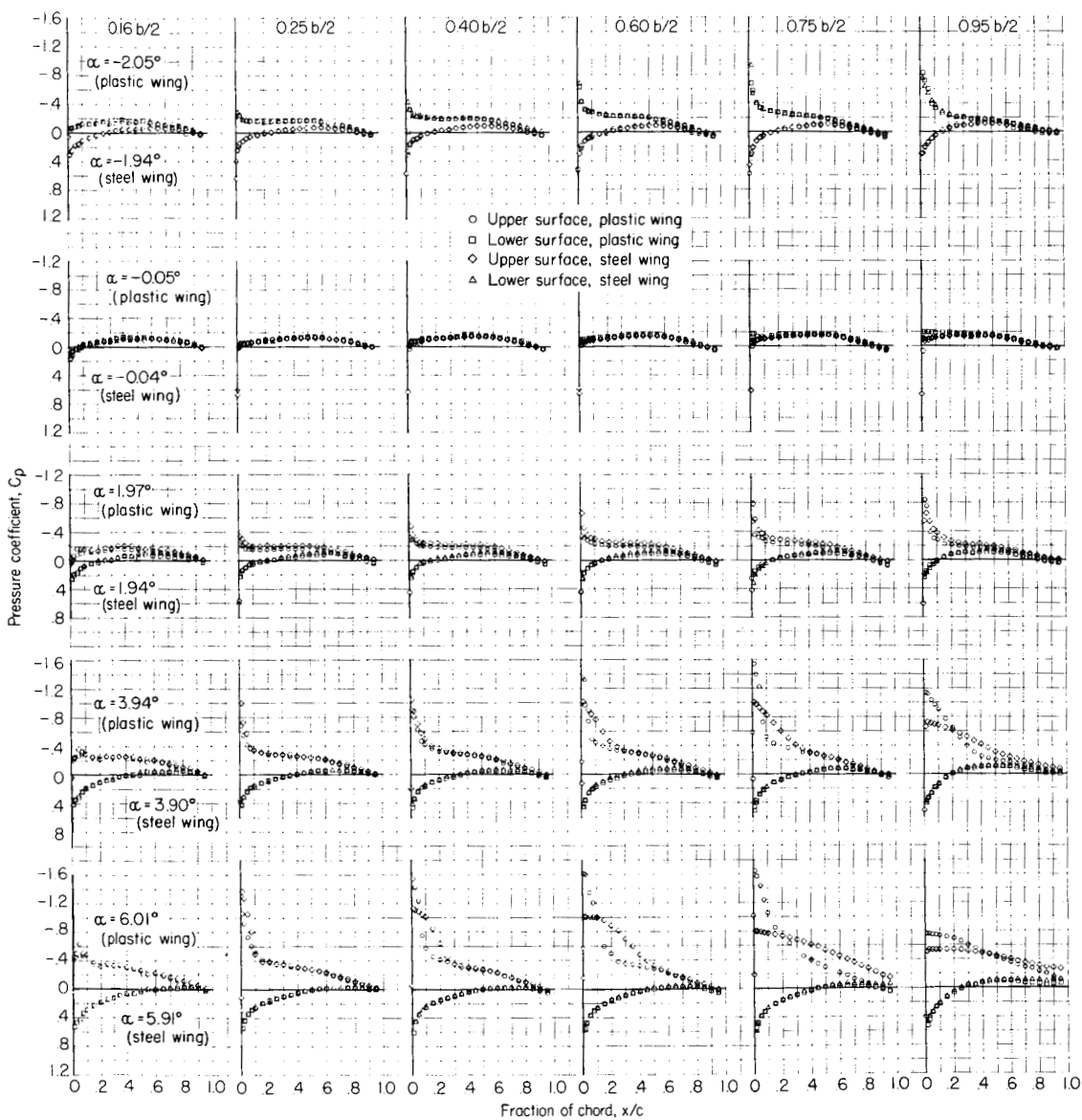
L-57-1640

Figure 3.- Continued.

$\alpha = 15^\circ$  $\alpha = 17^\circ$  $\alpha = 19^\circ$  $M = 0.80$ $\alpha = 15^\circ$  $\alpha = 17^\circ$  $M = 0.94$ $\alpha = 15^\circ$  $M = 1.03$ (c) $\alpha = 15^\circ$ to 19° .

L-57-1641

Figure 3.- Concluded.



(a) $M = 0.80$.

Figure 4.- Comparison of chordwise pressure distributions for steel and plastic wings.

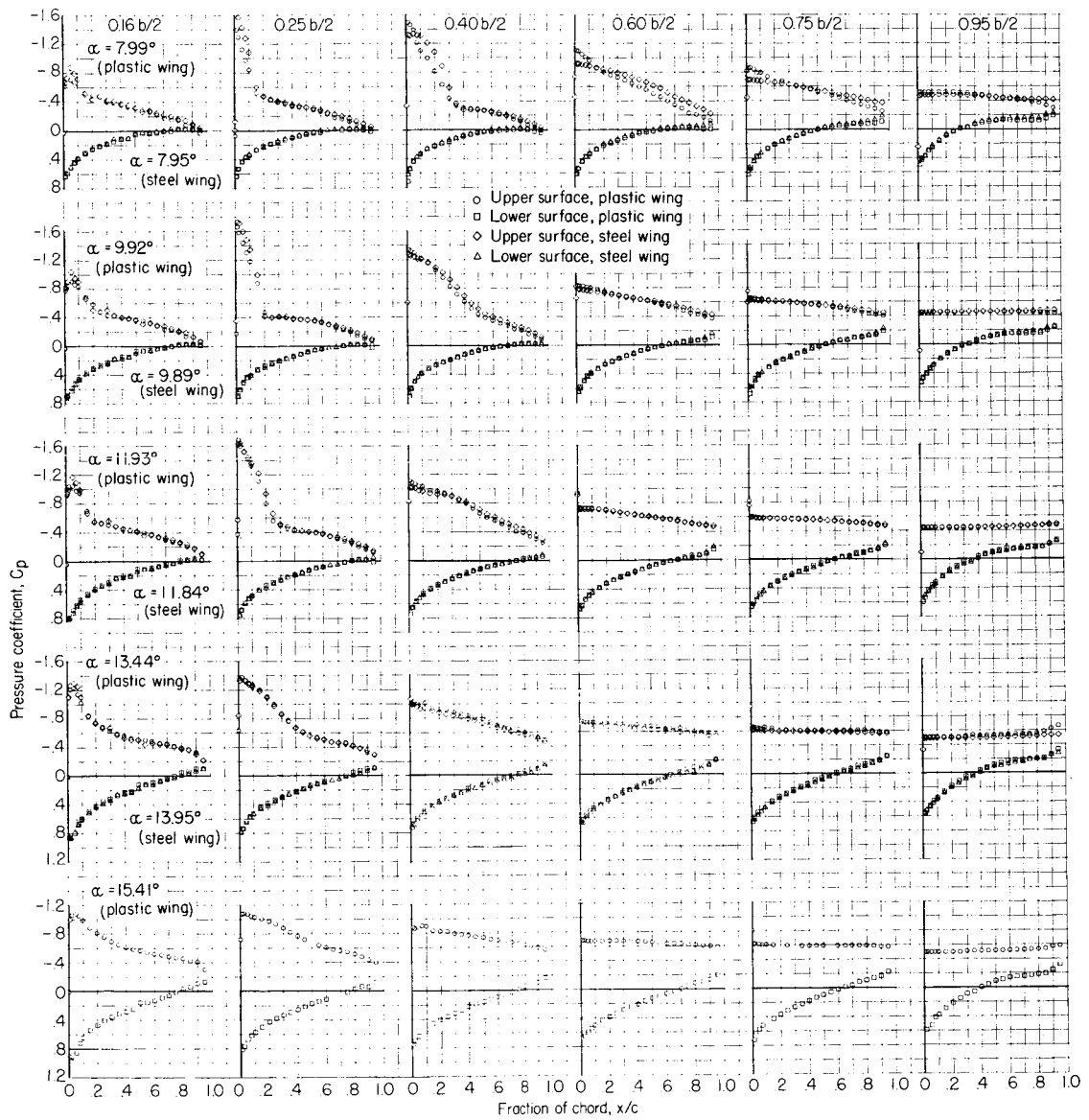
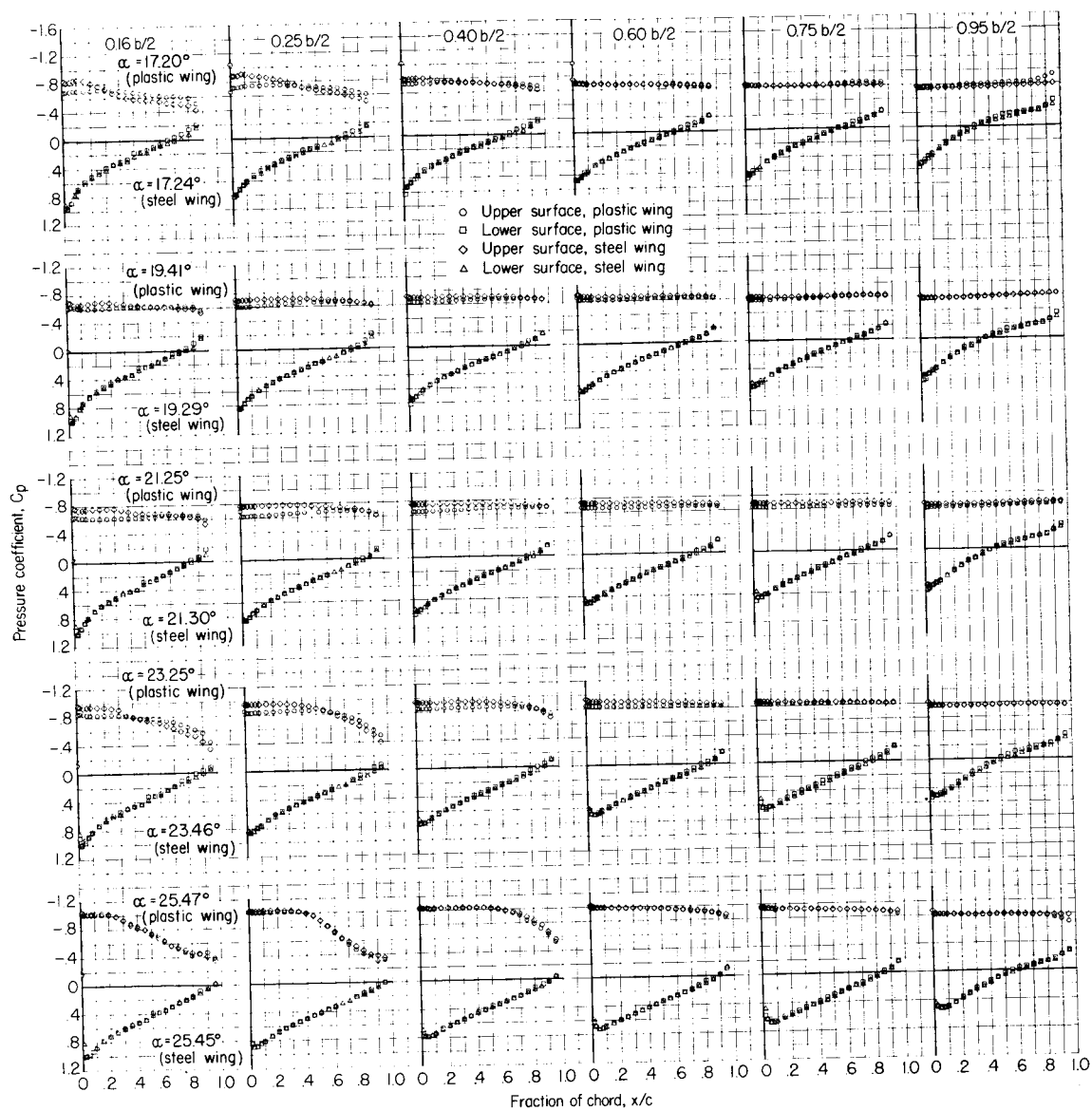
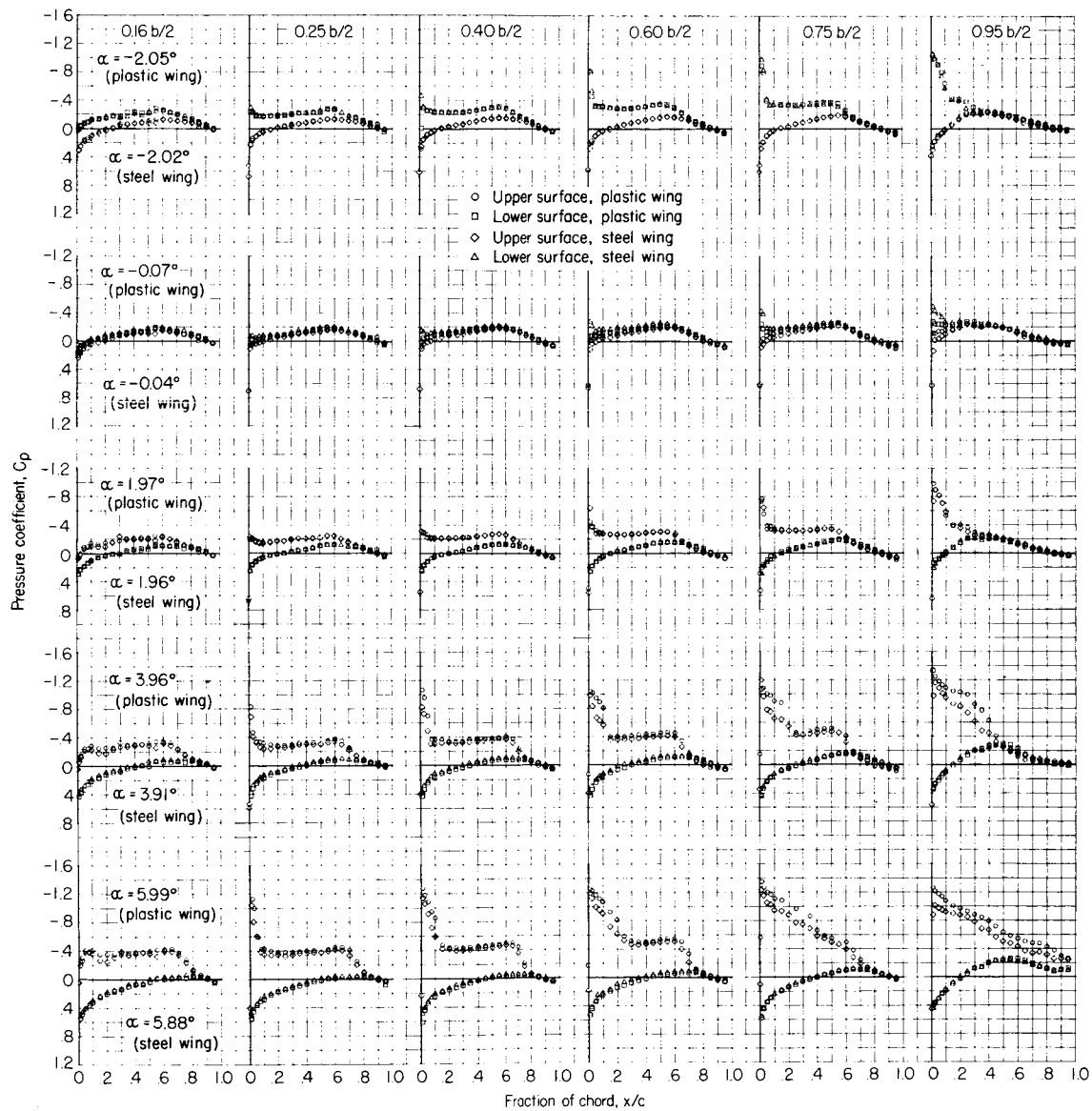
(a) $M = 0.80$, continued.

Figure 4.- Continued.



(a) $M = 0.80$, concluded.

Figure 4.- Continued.



(b) $M = 0.90$.

Figure 4.- Continued.

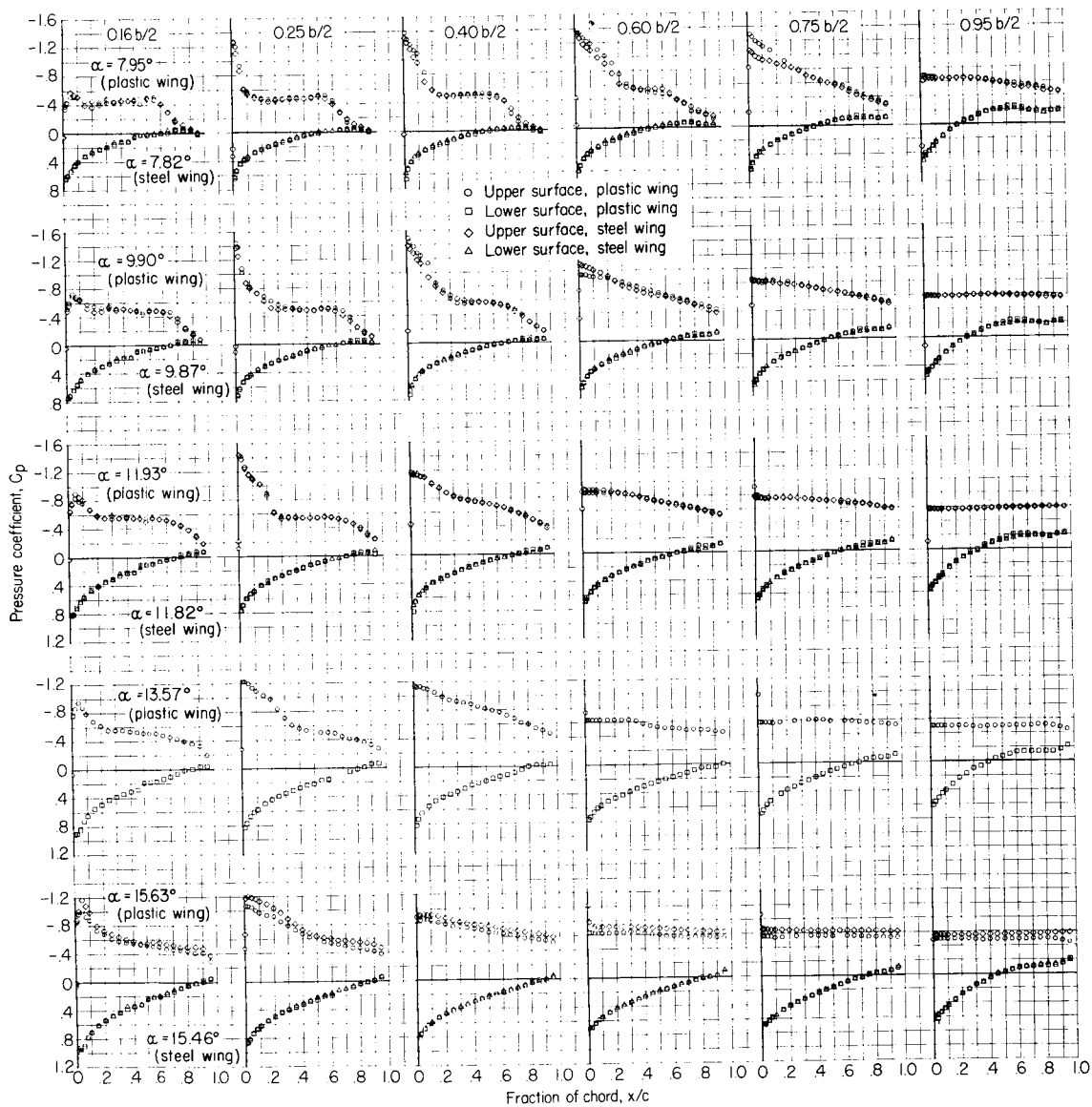
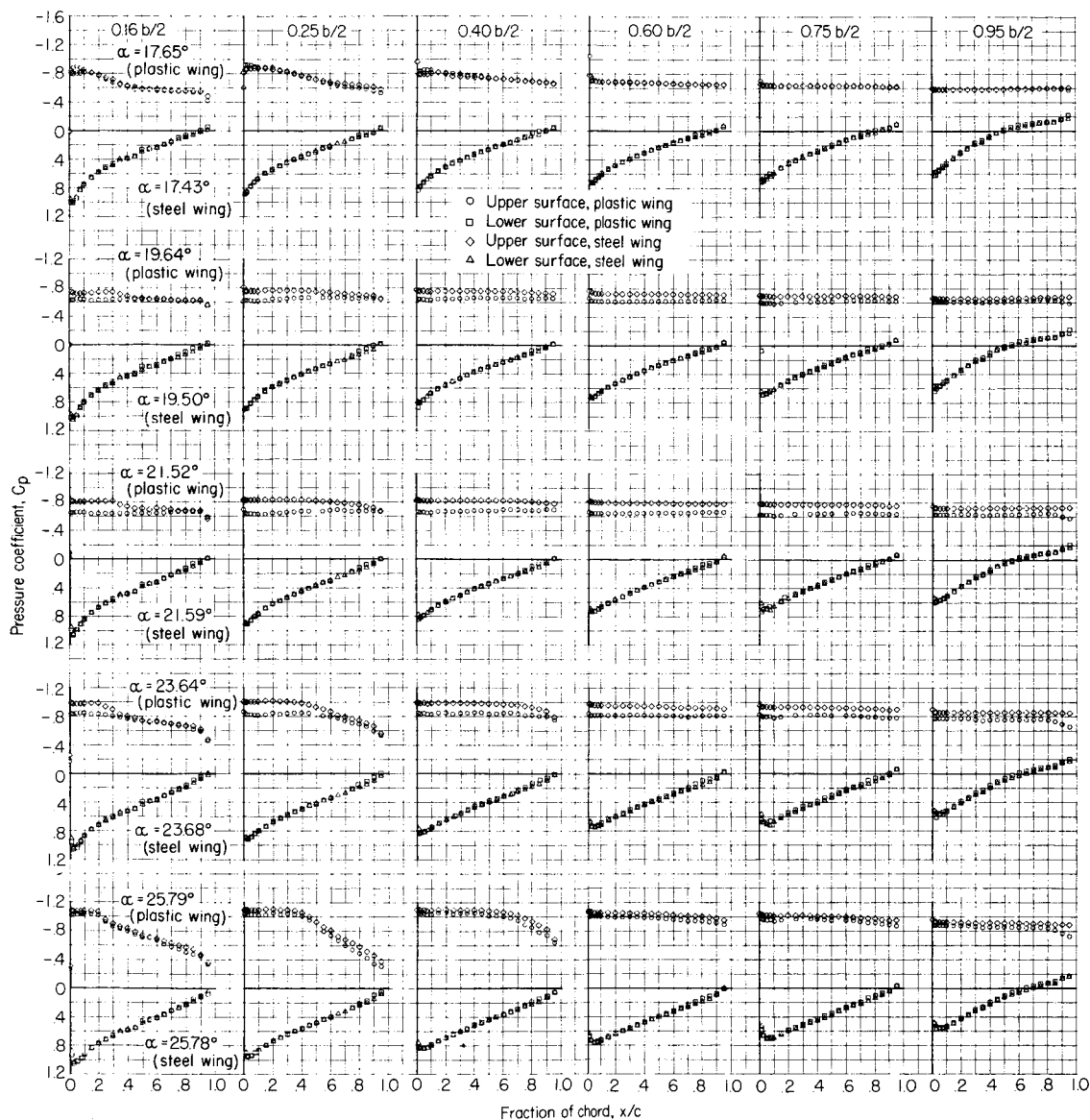
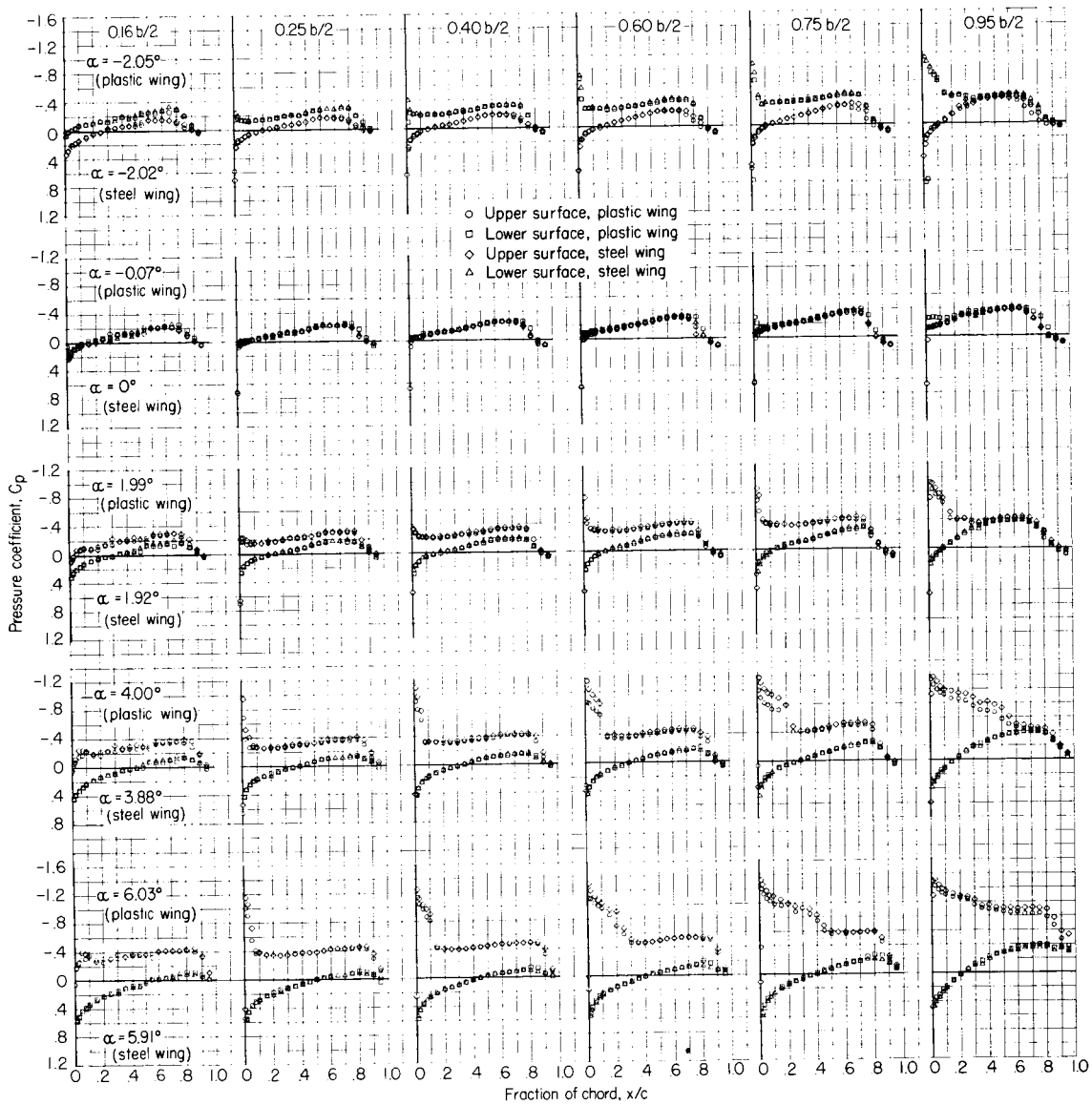
(b) $M = 0.90$, continued.

Figure 4.- Continued.



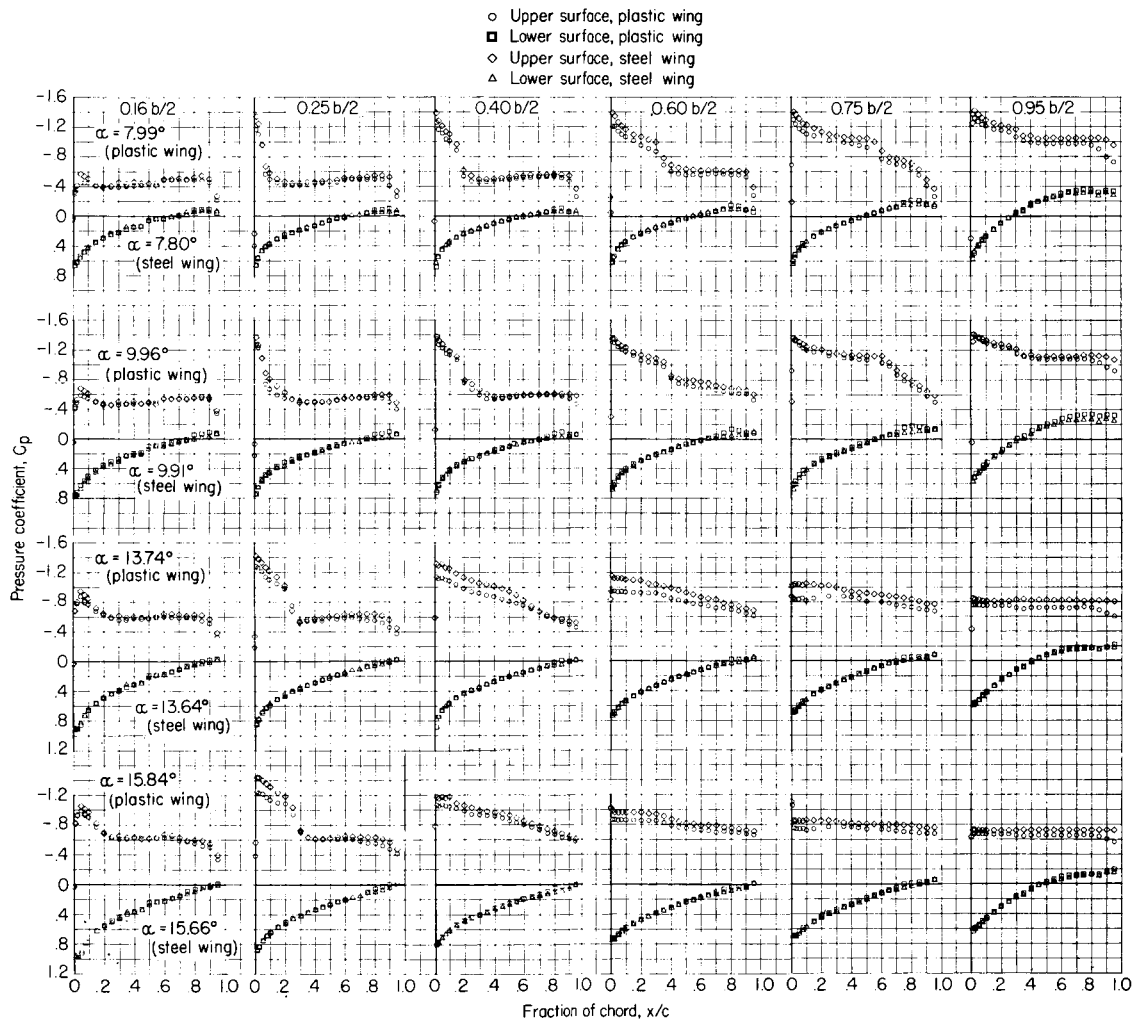
(b) $M = 0.90$, concluded.

Figure 4.- Continued.



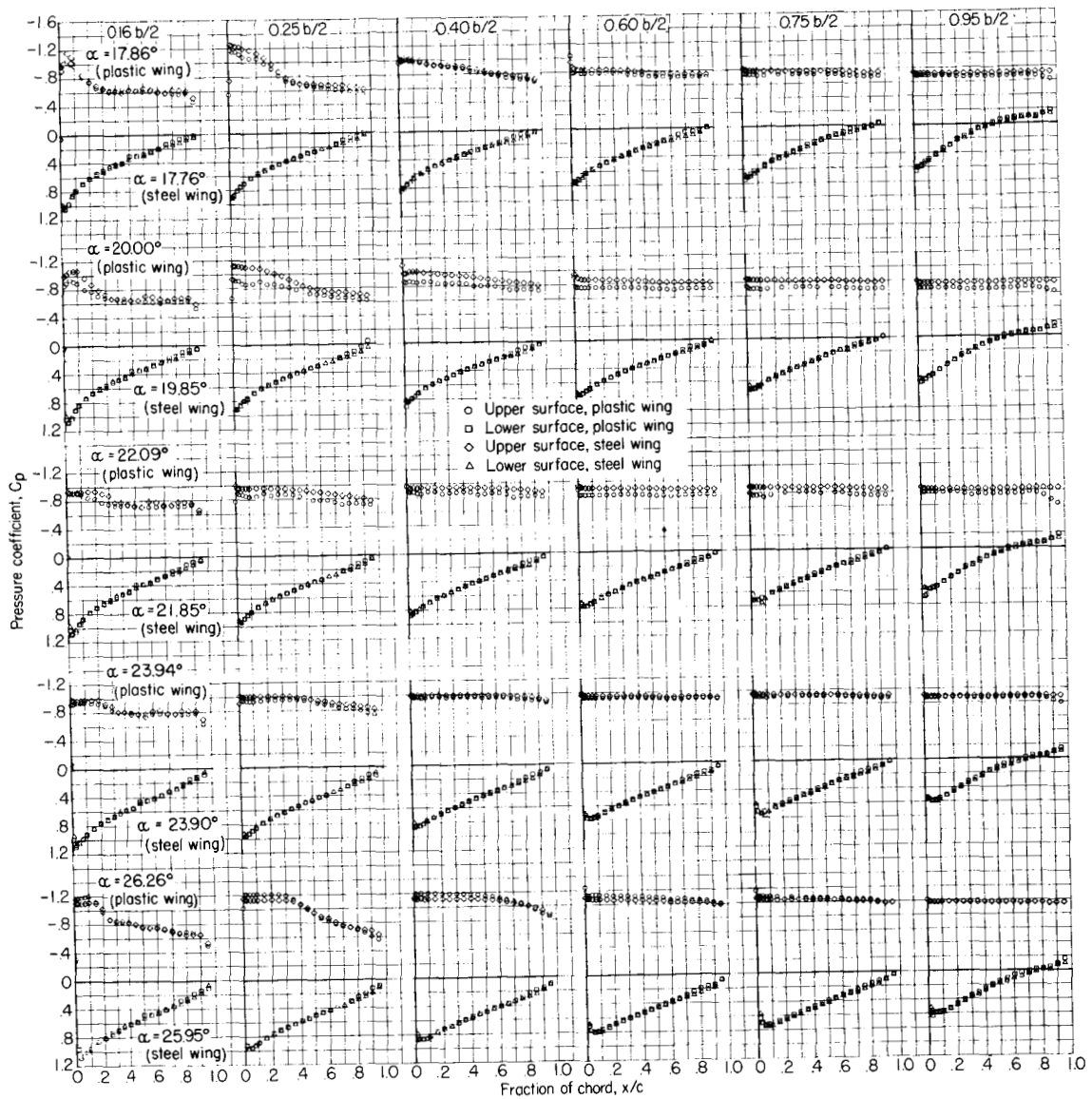
(c) $M = 0.94$.

Figure 4.- Continued.



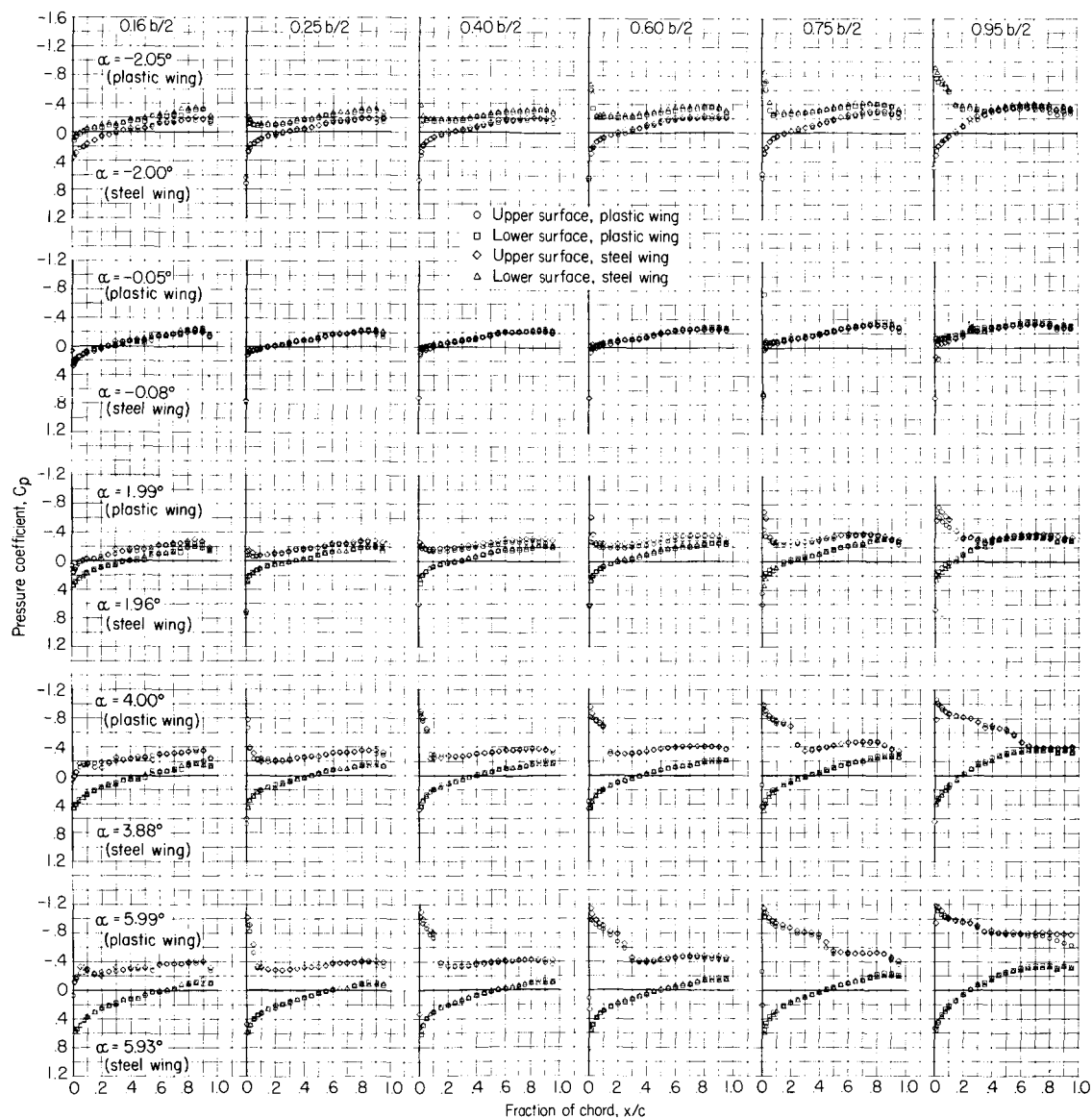
(c) $M = 0.94$, continued.

Figure 4.- Continued.



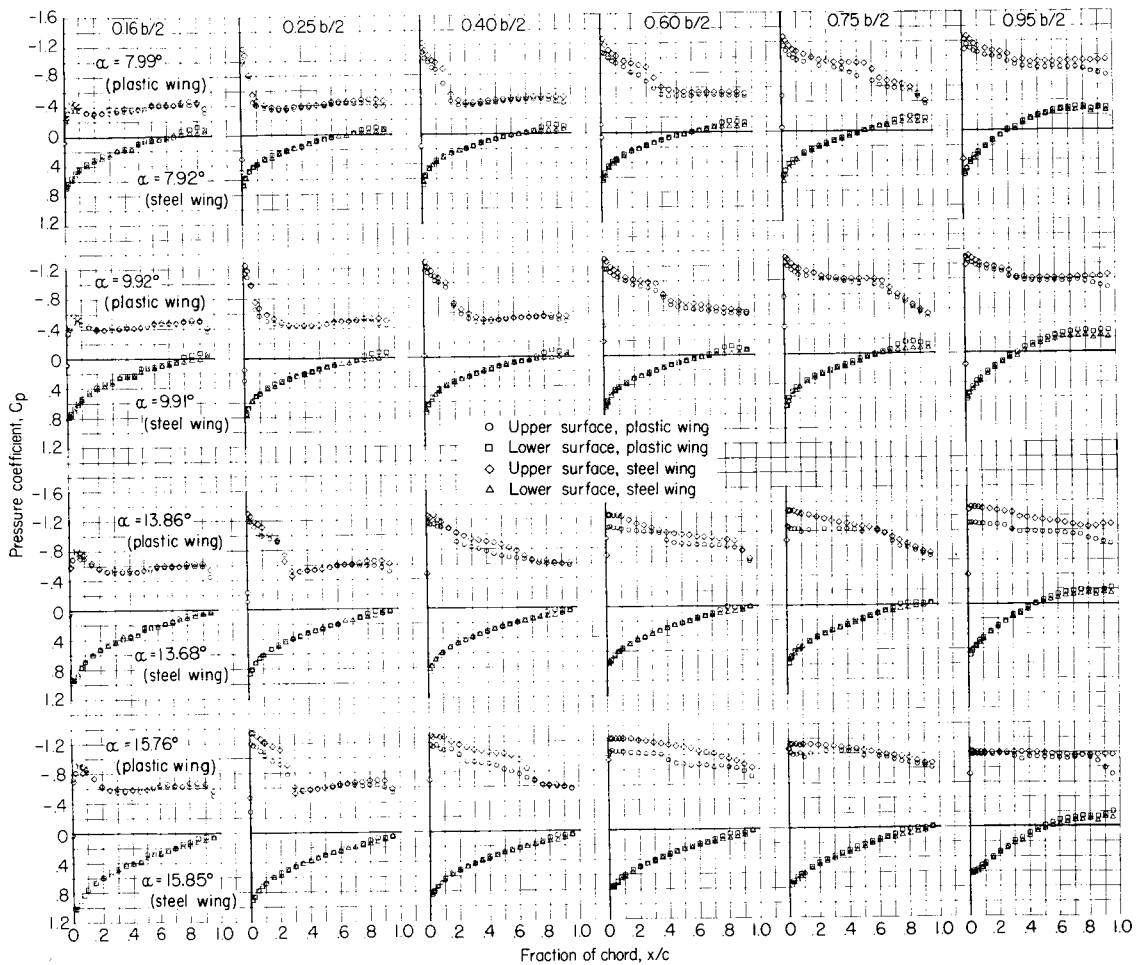
(c) $M = 0.94$, concluded.

Figure 4.- Continued.



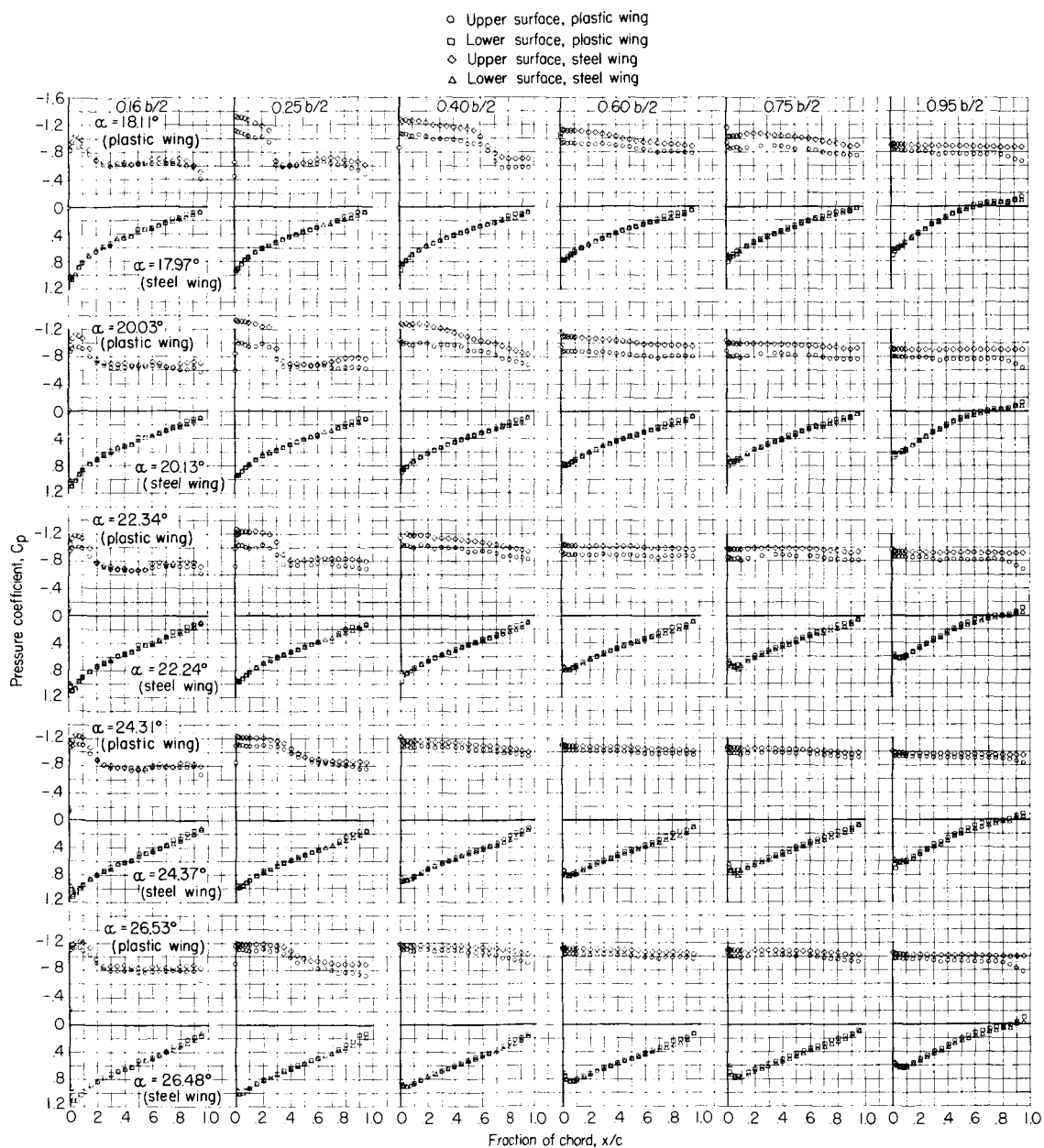
(d) $M = 0.98$.

Figure 4.- Continued.



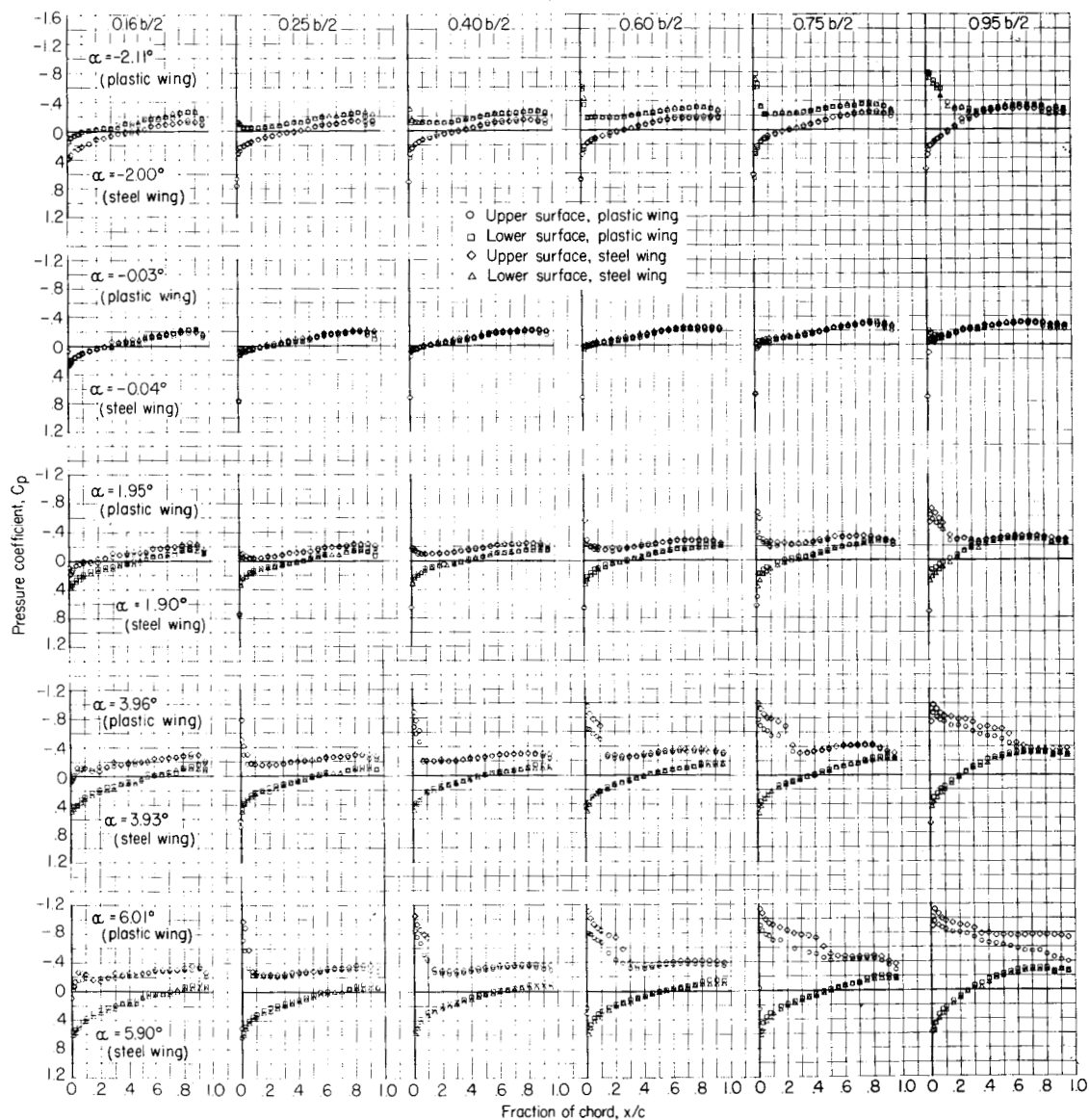
(d) $M = 0.98$, continued.

Figure 4.- Continued.



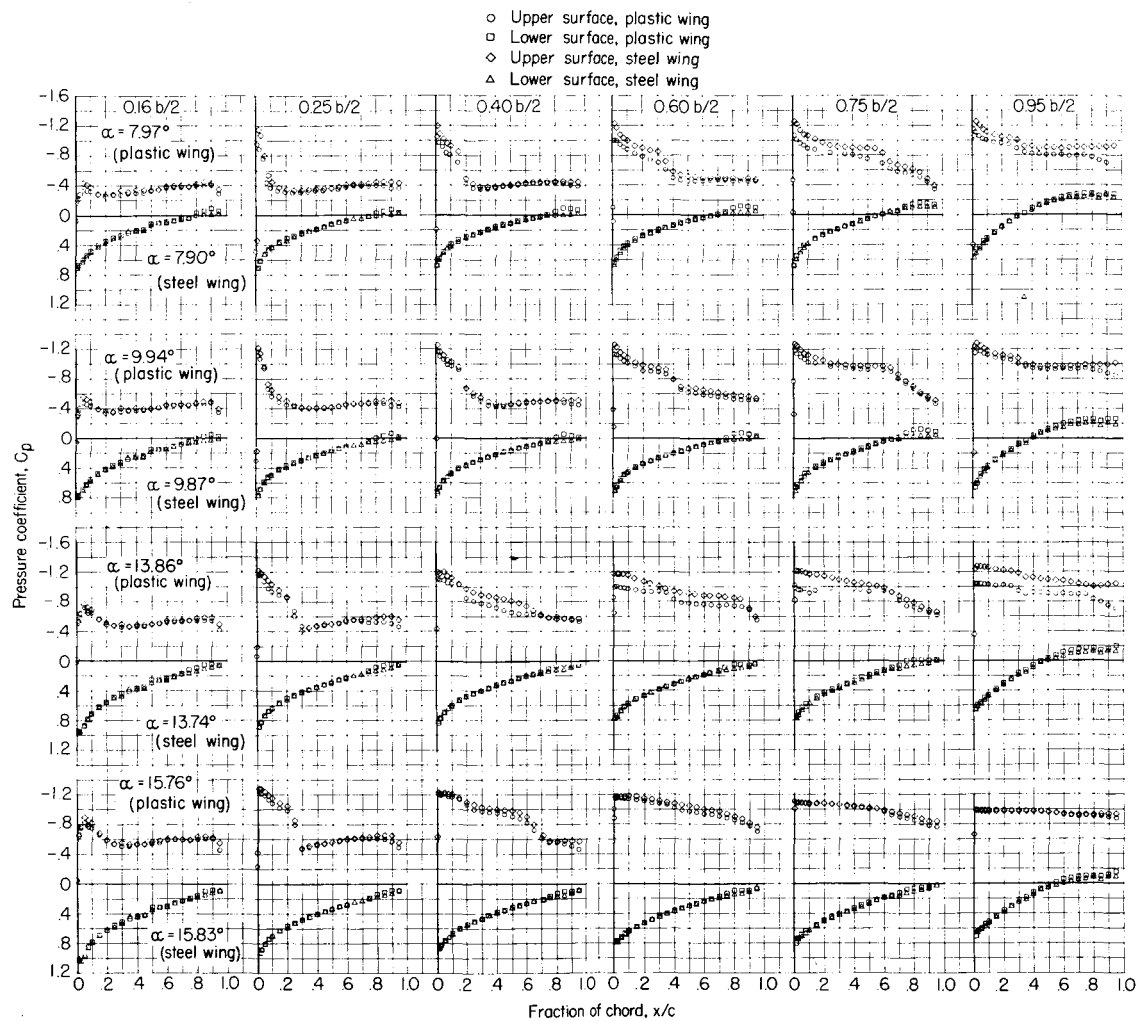
(d) $M = 0.98$, concluded.

Figure 4.- Continued.



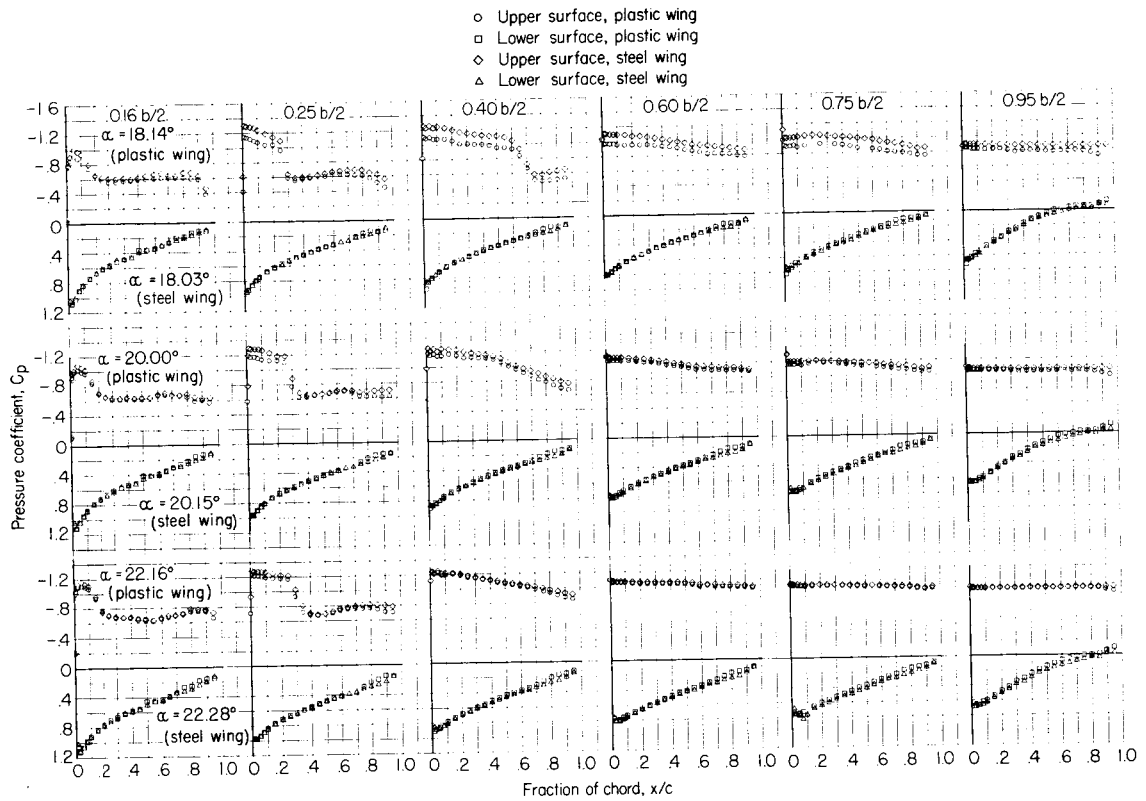
(e) $M = 1.00$.

Figure 4.- Continued.



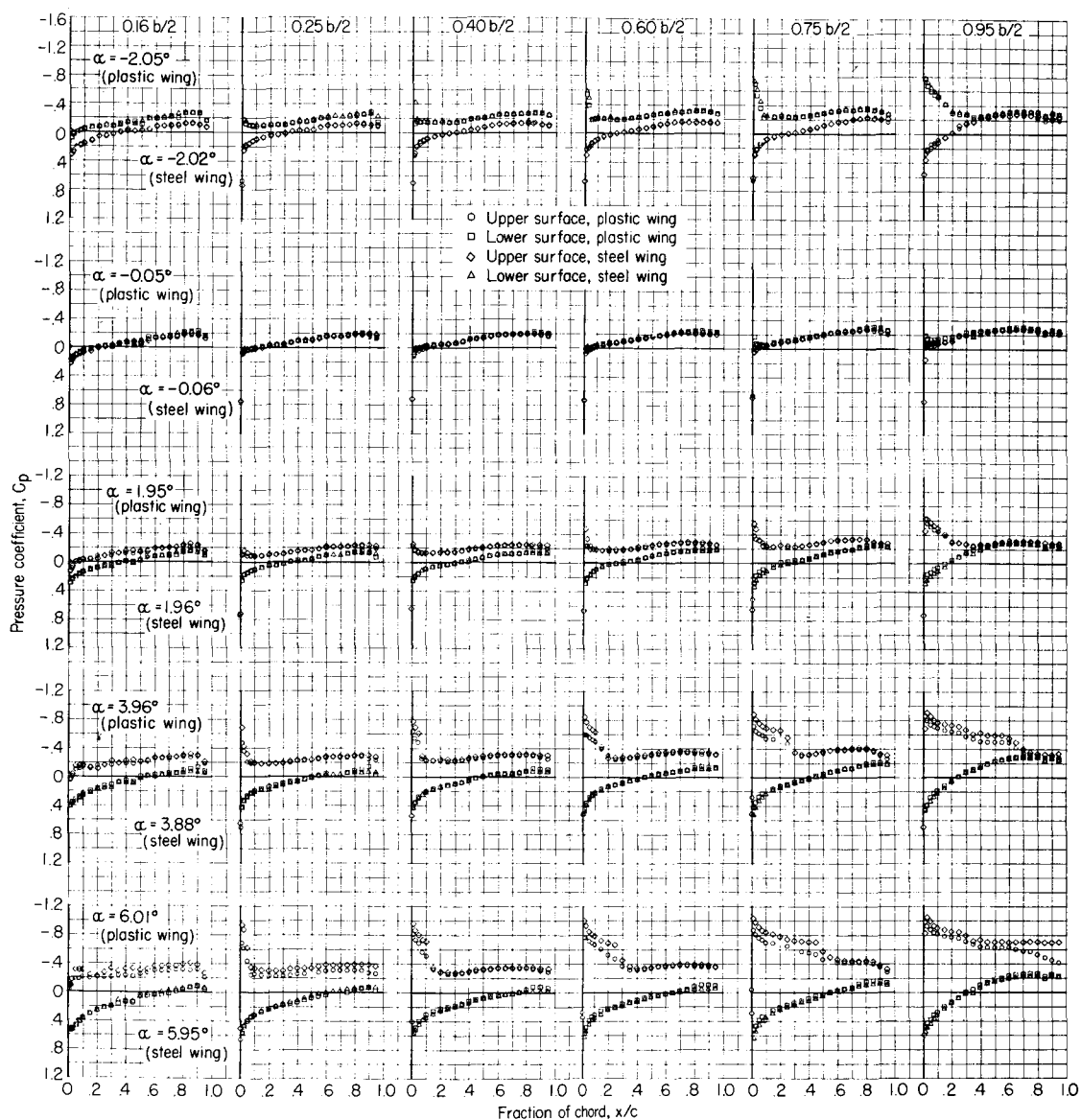
(e) $M = 1.00$, continued.

Figure 4.- Continued.



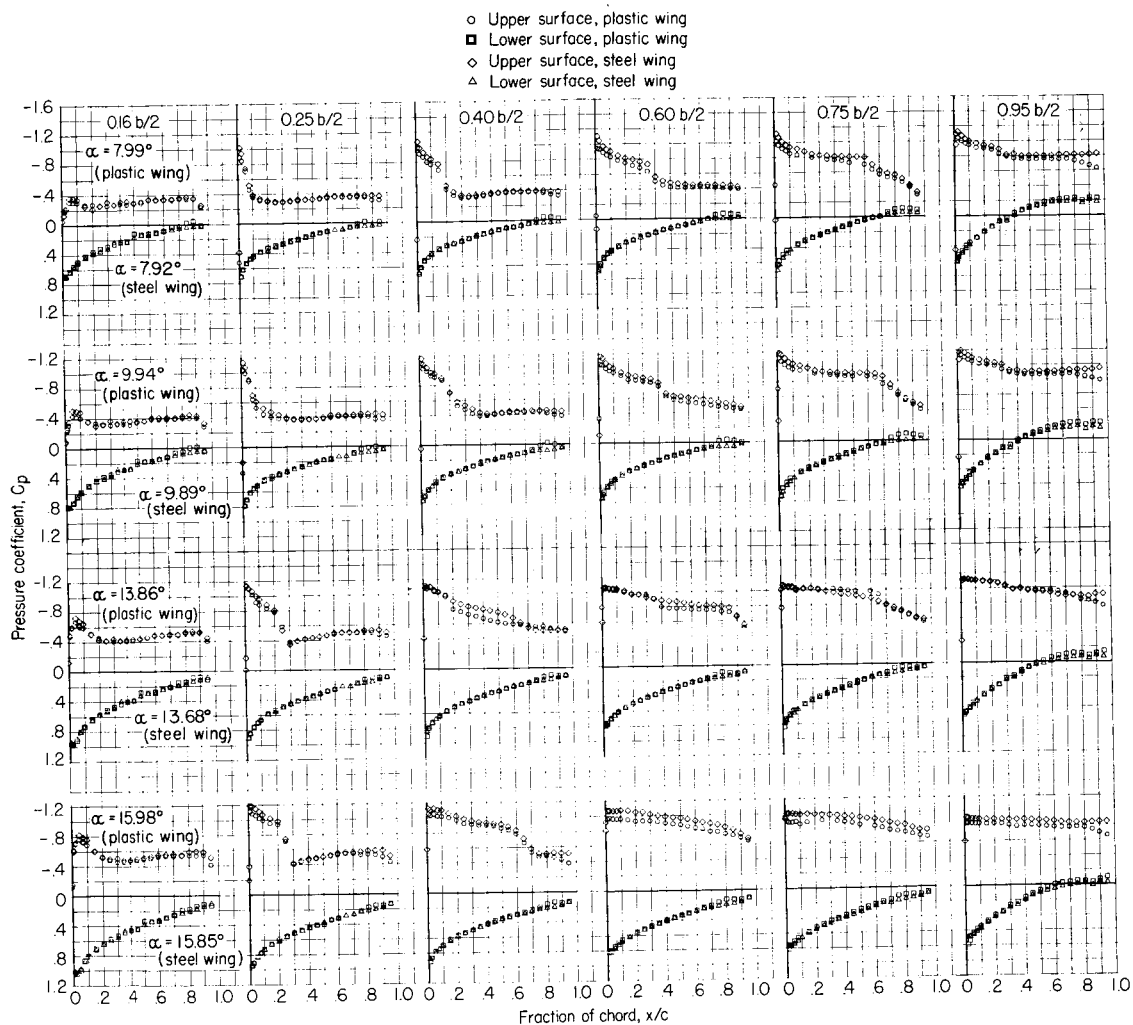
(e) $M = 1.00$, concluded.

Figure 4.- Continued.



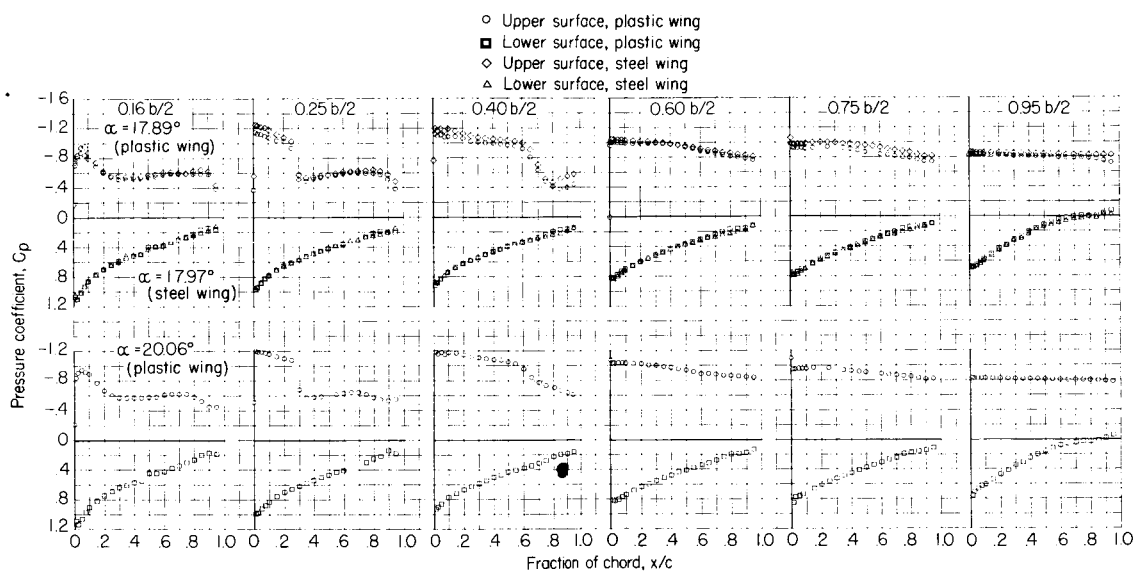
(f) $M = 1.03$.

Figure 4.- Continued.



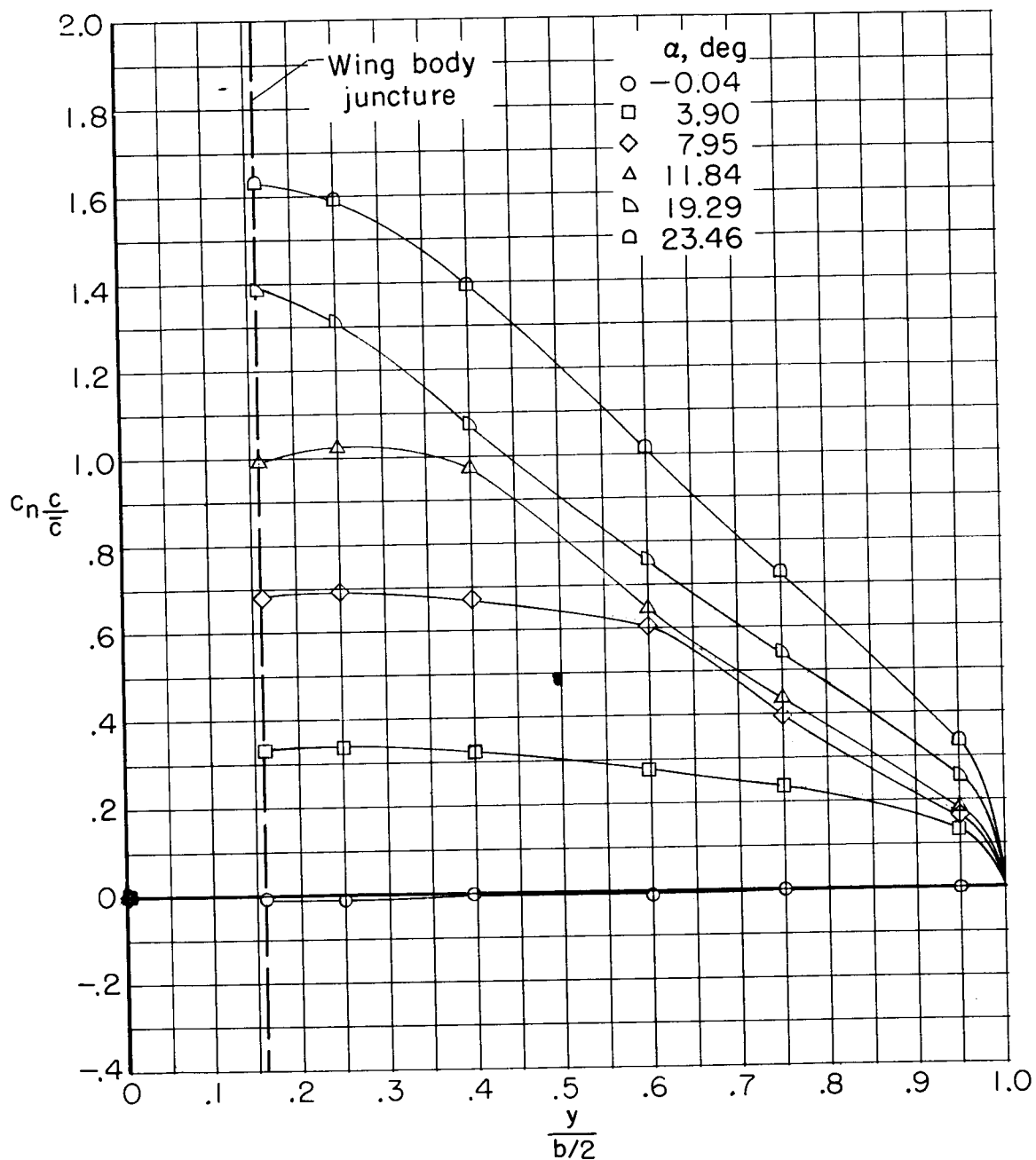
(f) $M = 1.03$, continued.

Figure 4.- Continued.



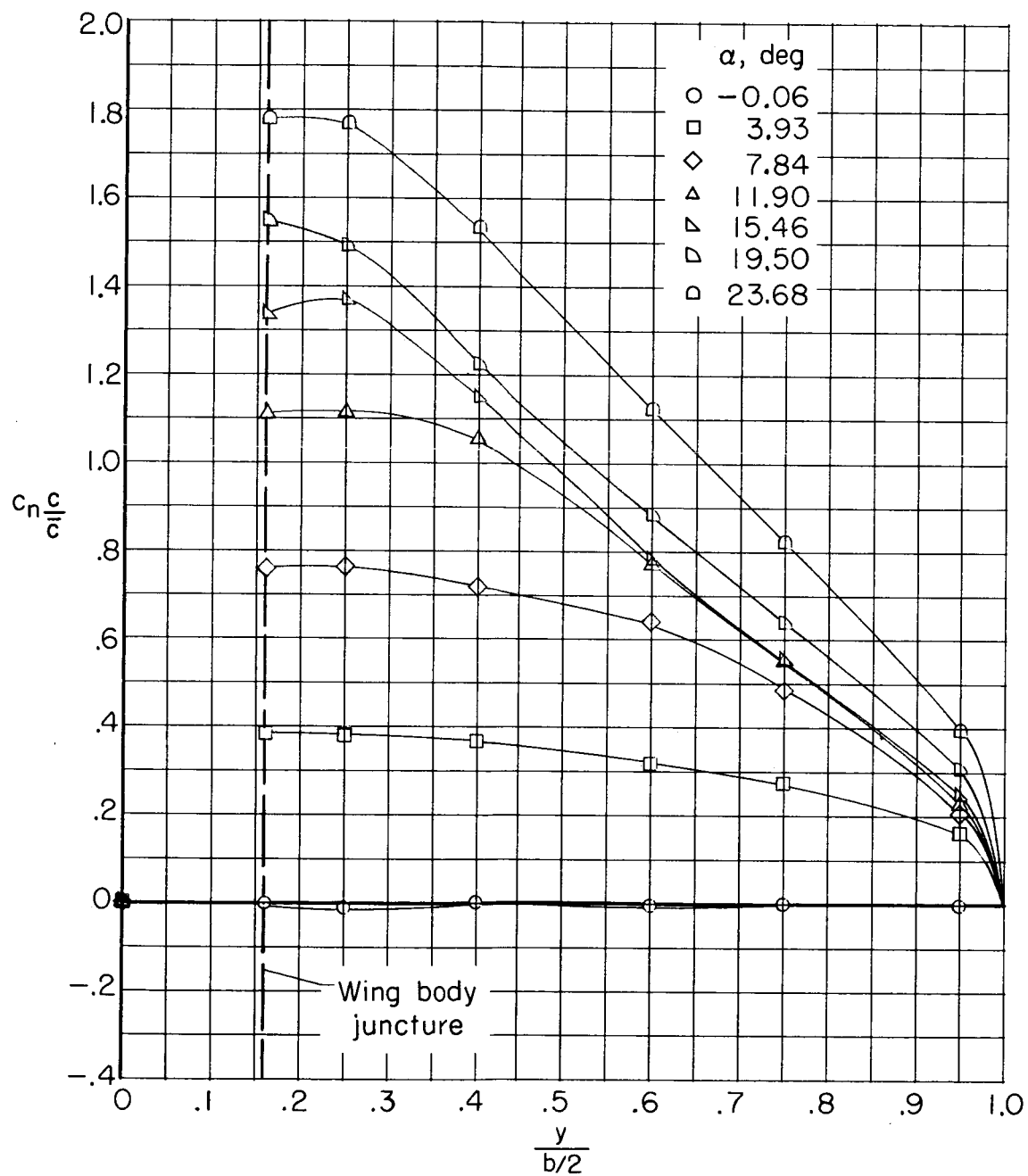
(f) $M = 1.03$, concluded.

Figure 4.- Concluded.



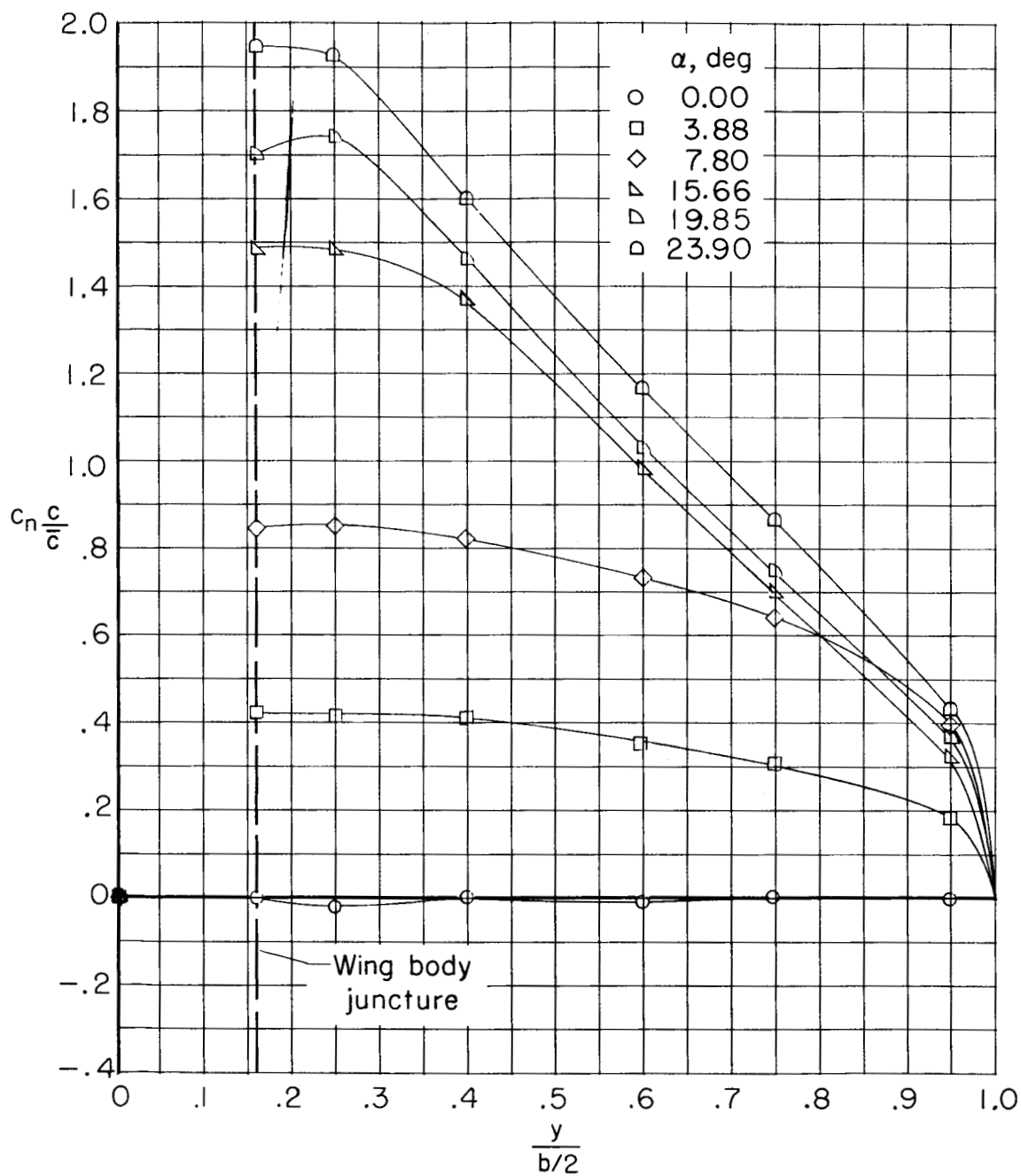
(a) $M = 0.80$.

Figure 5.- Spanwise variation of normal-load parameter for steel wing at various angles of attack and Mach numbers.



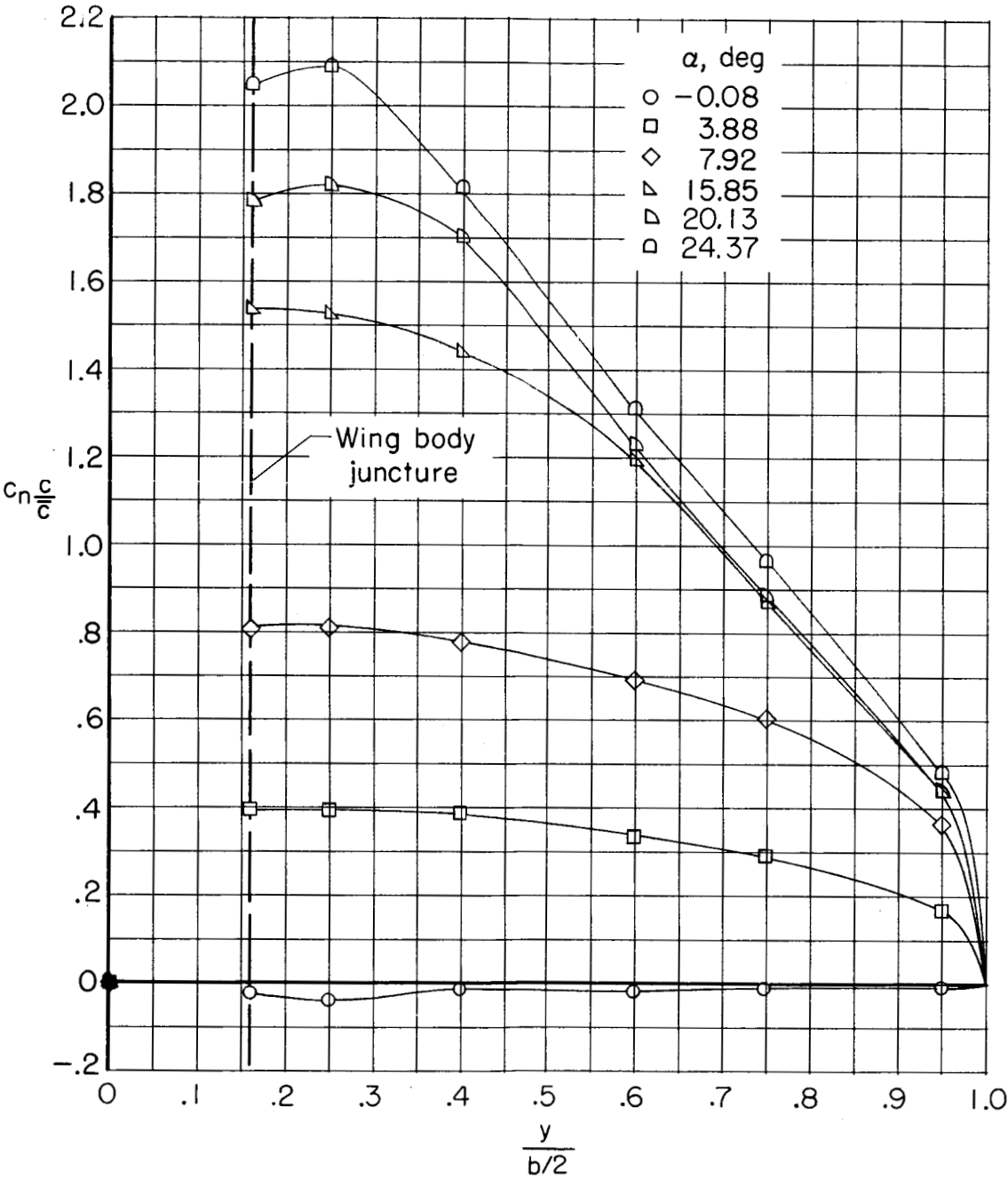
(b) $M = 0.90$.

Figure 5.- Continued.



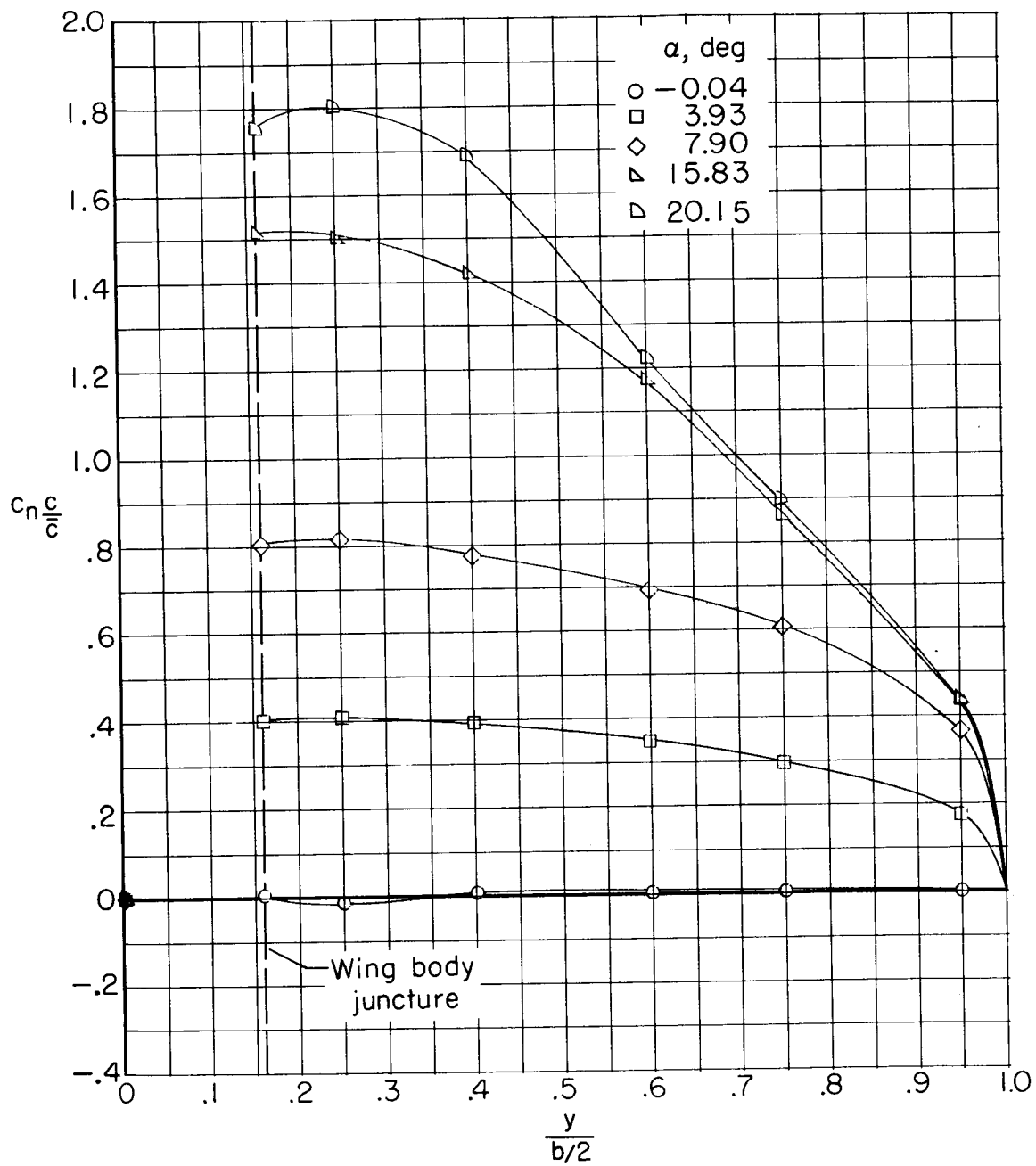
(c) $M = 0.94$.

Figure 5.- Continued.



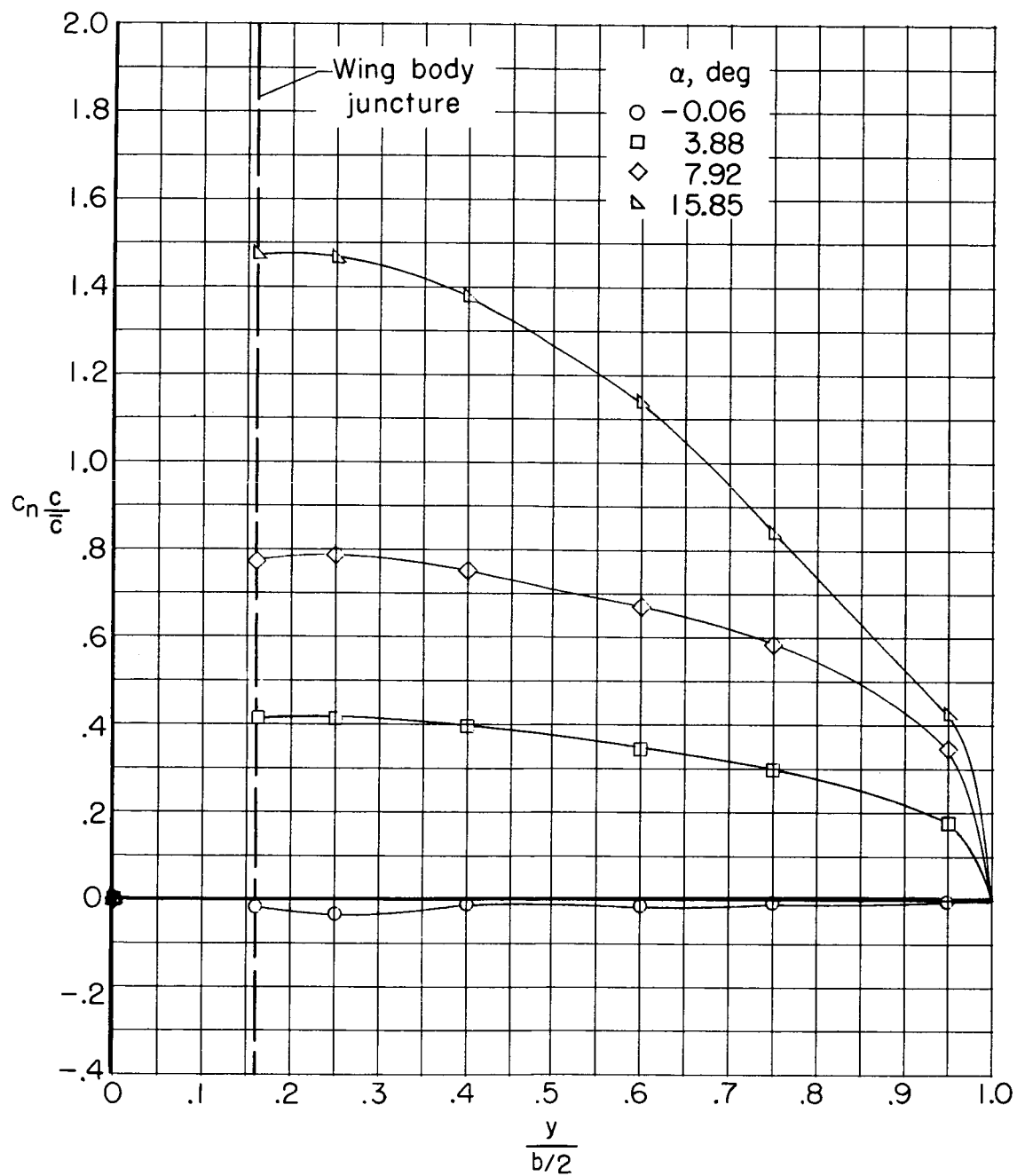
(d) $M = 0.98$.

Figure 5.- Continued.



(e) $M = 1.00$.

Figure 5.- Continued.



(f) $M = 1.03$.

Figure 5.- Concluded.

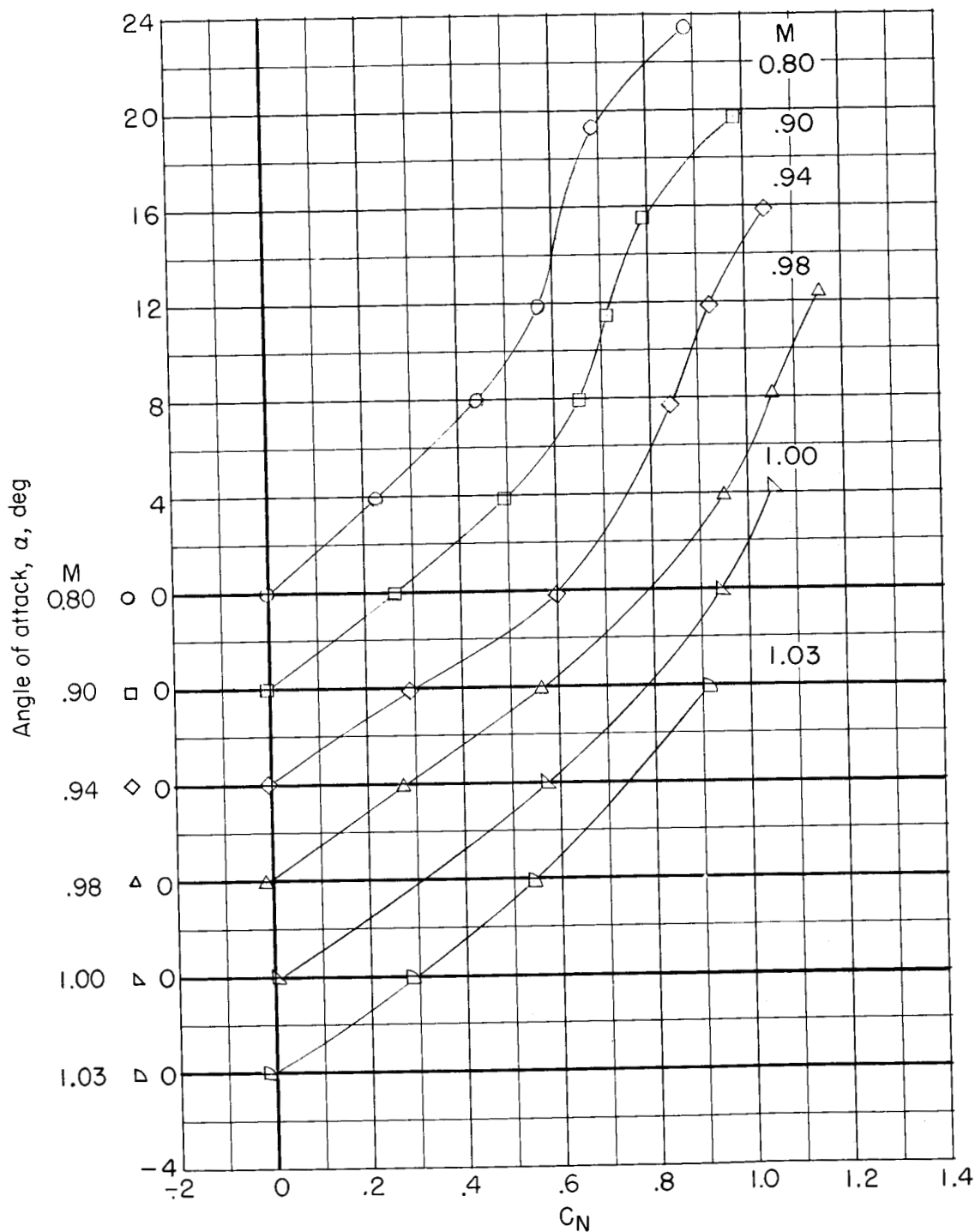


Figure 6.- Variation of angle of attack with wing normal-force coefficient for several Mach numbers. Steel wing.

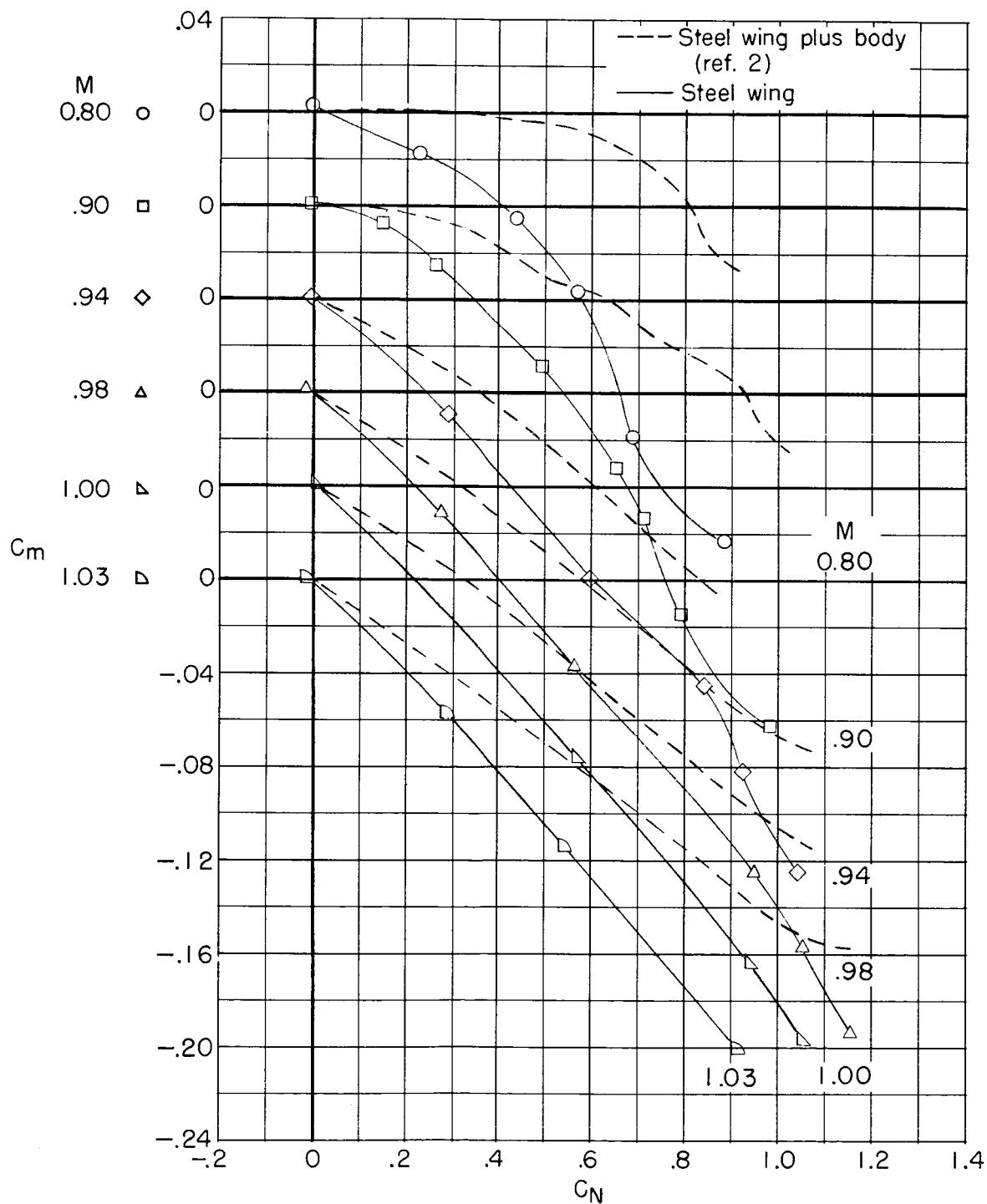
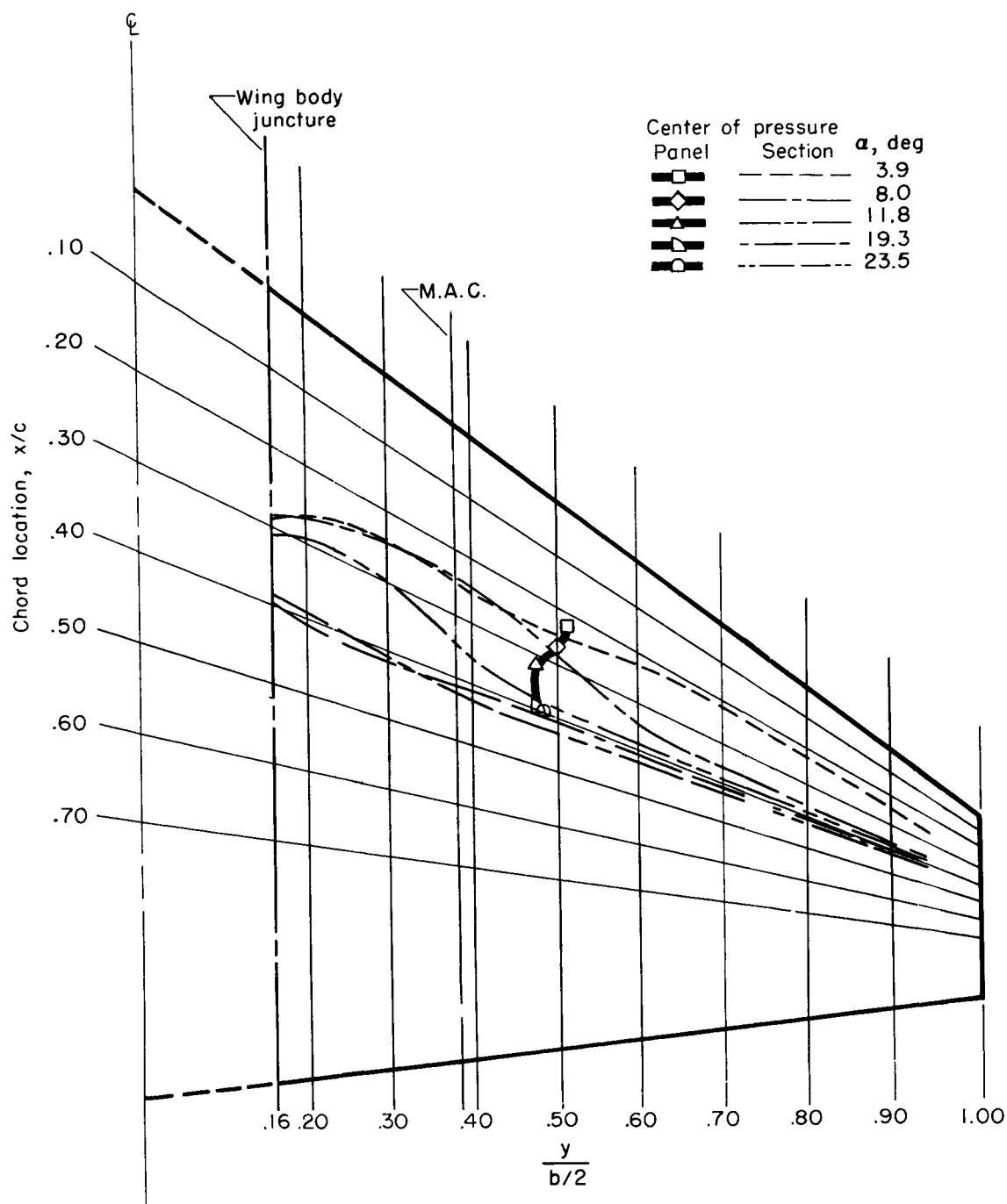
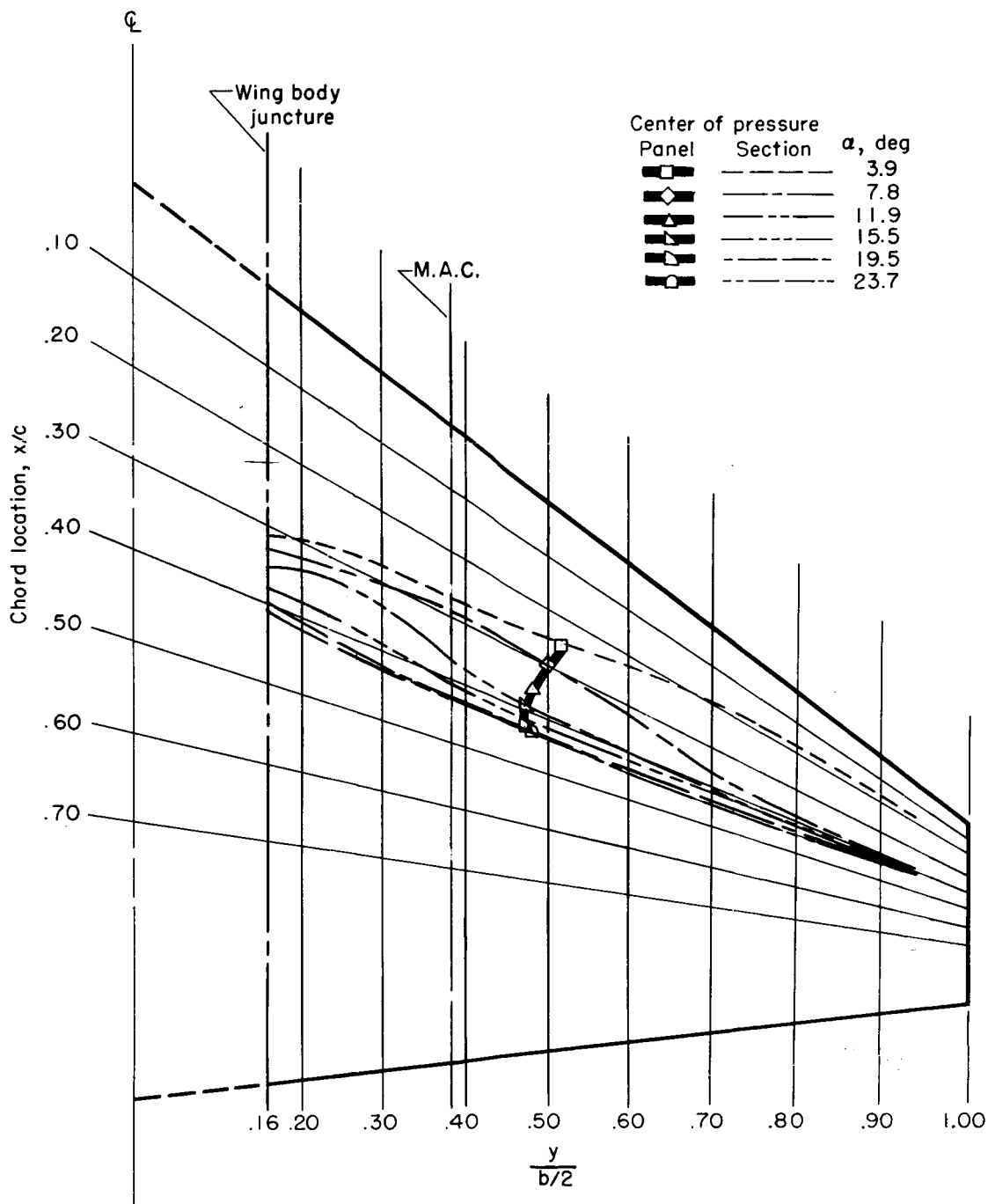


Figure 7.- Variation of wing pitching-moment coefficient with wing normal-force coefficient for several Mach numbers. Steel wing.



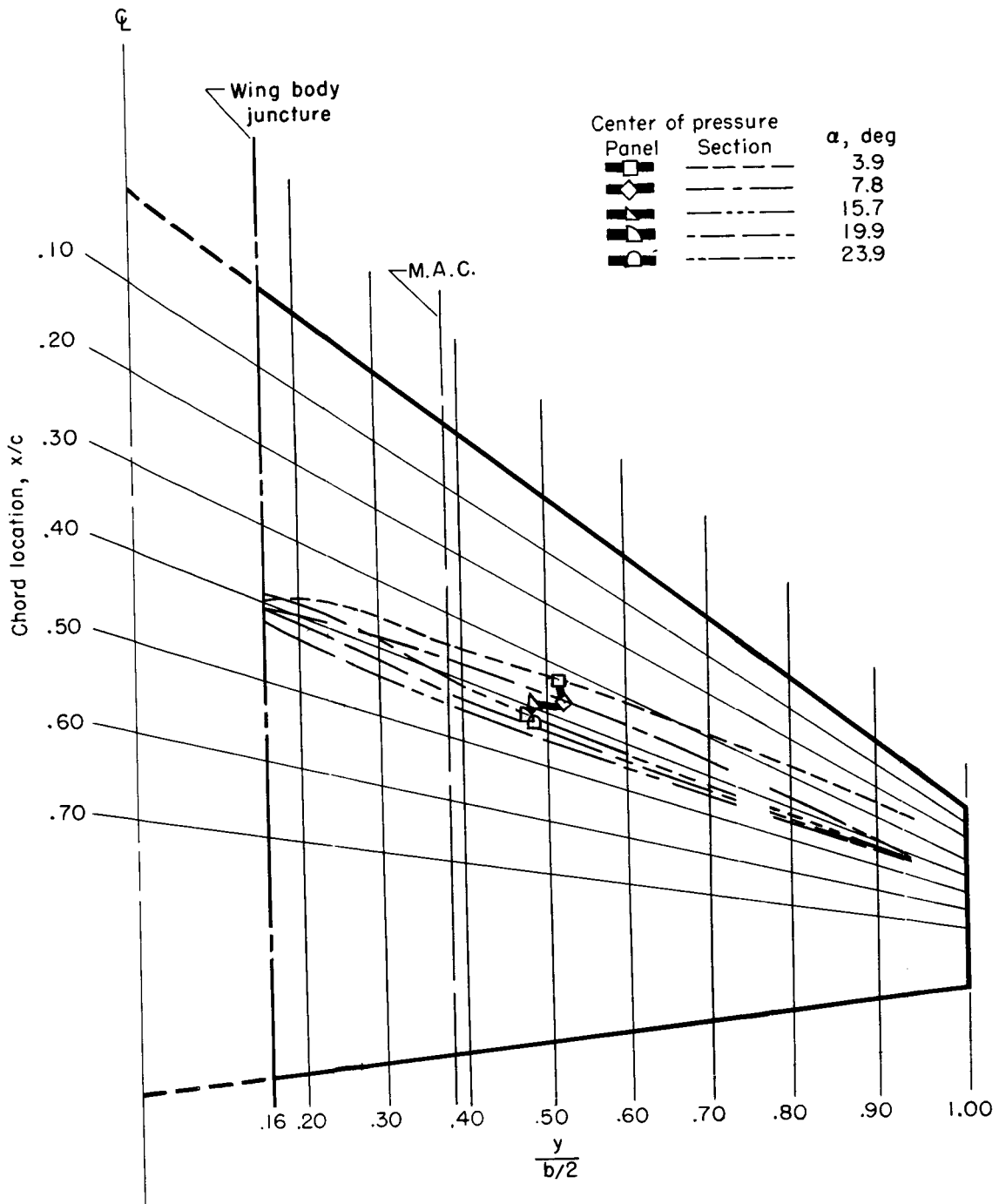
(a) $M = 0.80$.

Figure 8.- Variation of center-of-pressure location for wing panel and for local sections with angle of attack for several Mach numbers. Steel wing.



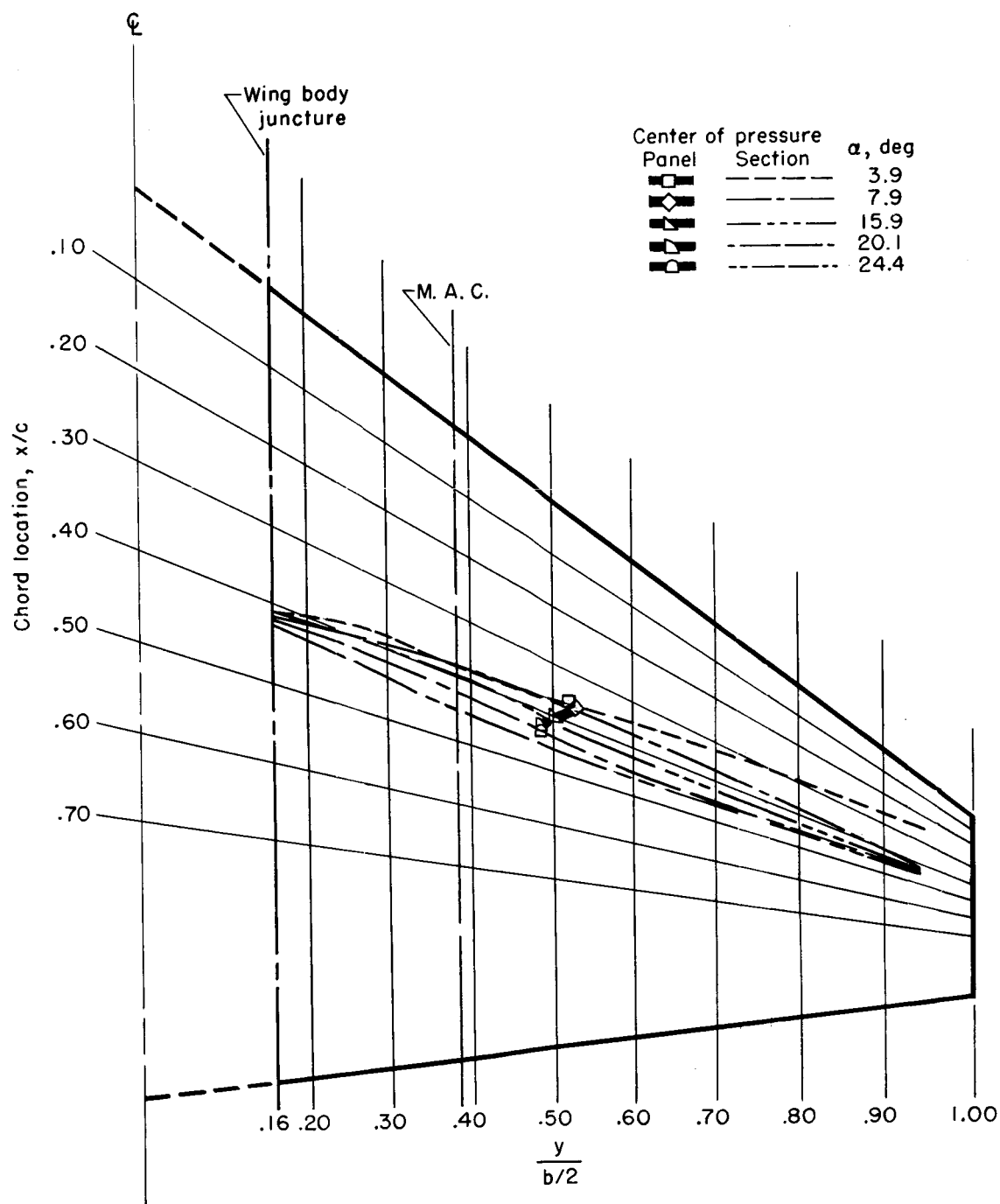
(b) $M = 0.90$.

Figure 8.- Continued.



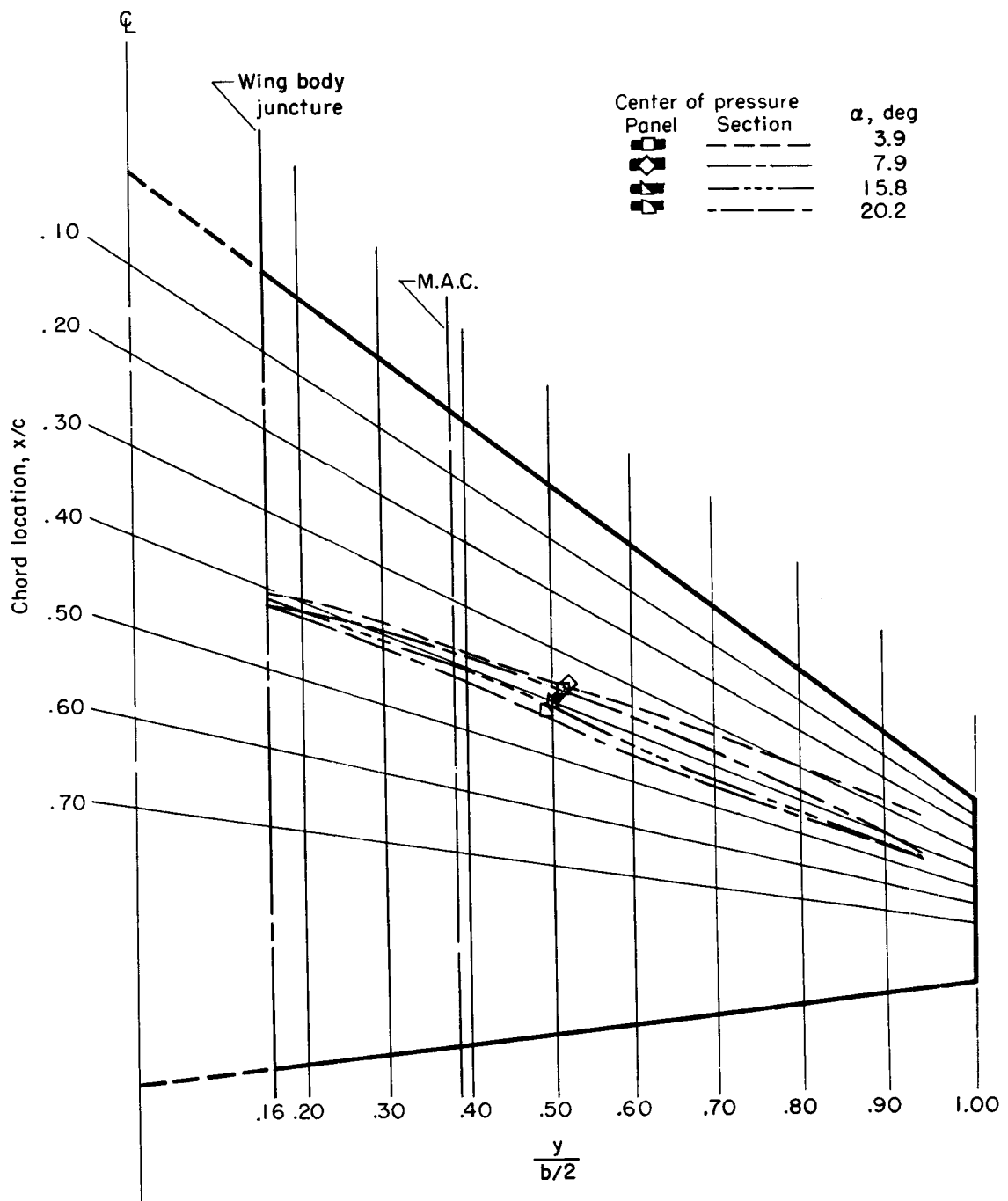
(c) $M = 0.94$.

Figure 8.- Continued.



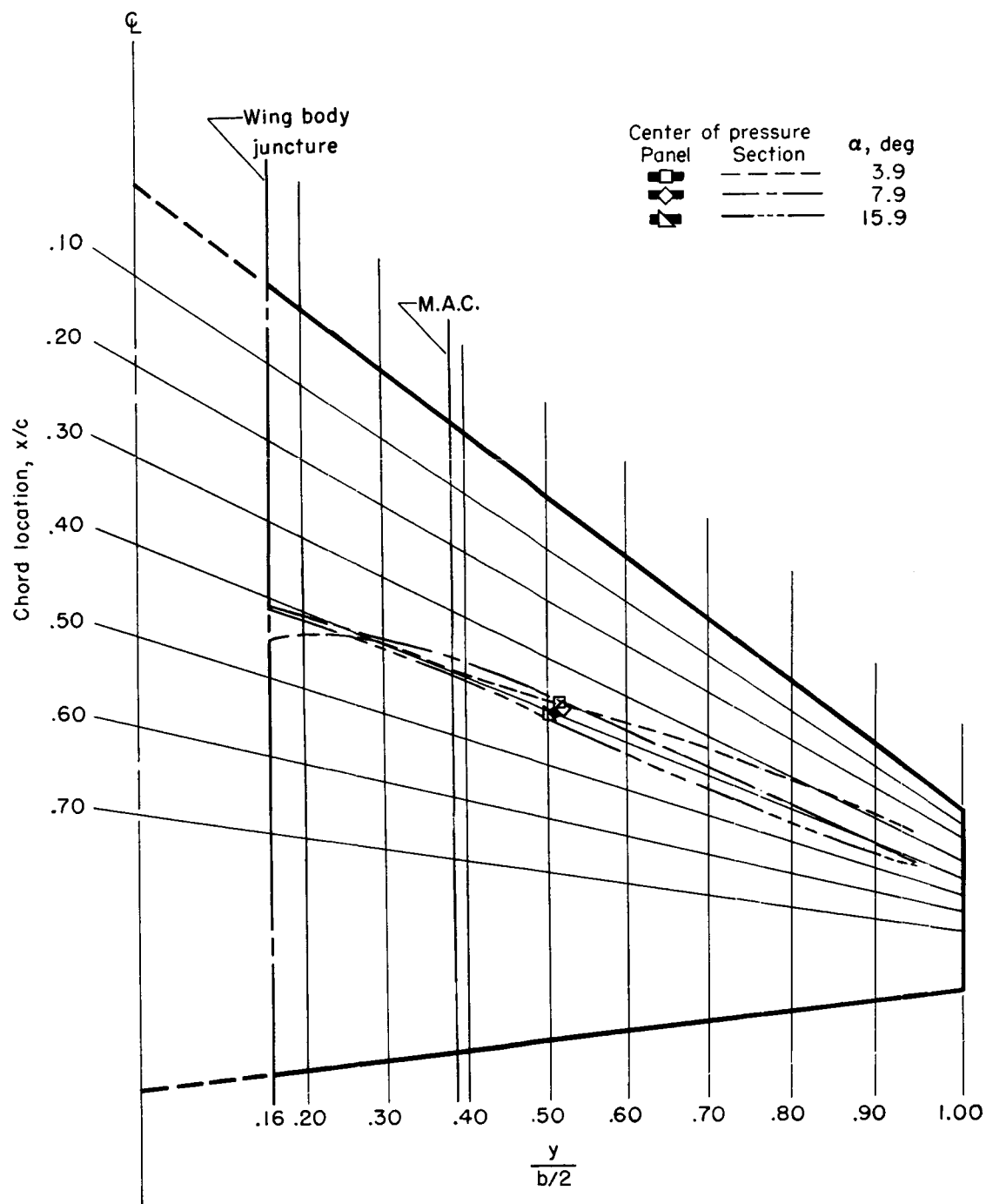
(d) $M = 0.98$.

Figure 8.- Continued.



(e) $M = 1.00$.

Figure 8.- Continued.



(f) $M = 1.03$.

Figure 8.- Concluded.

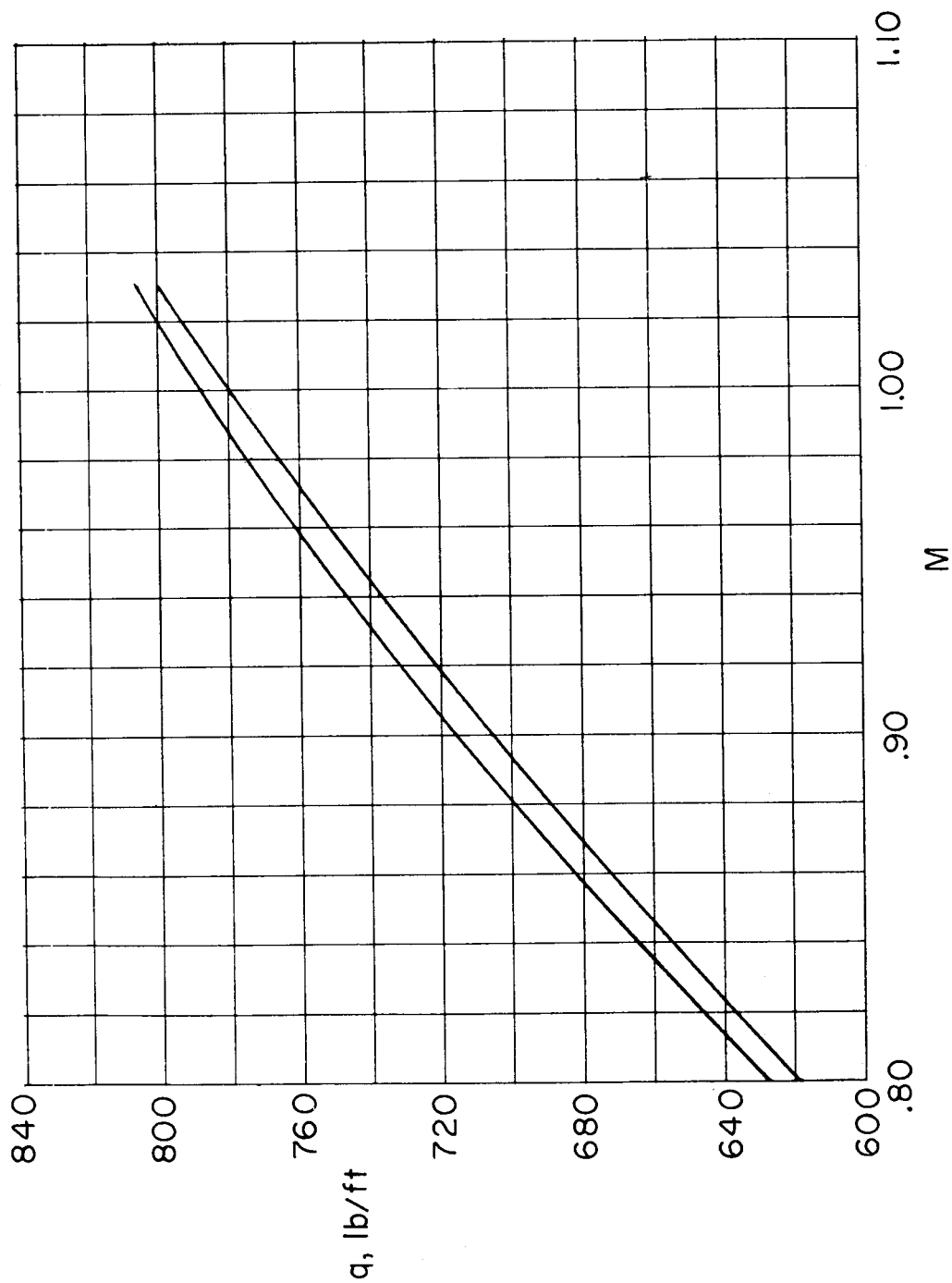
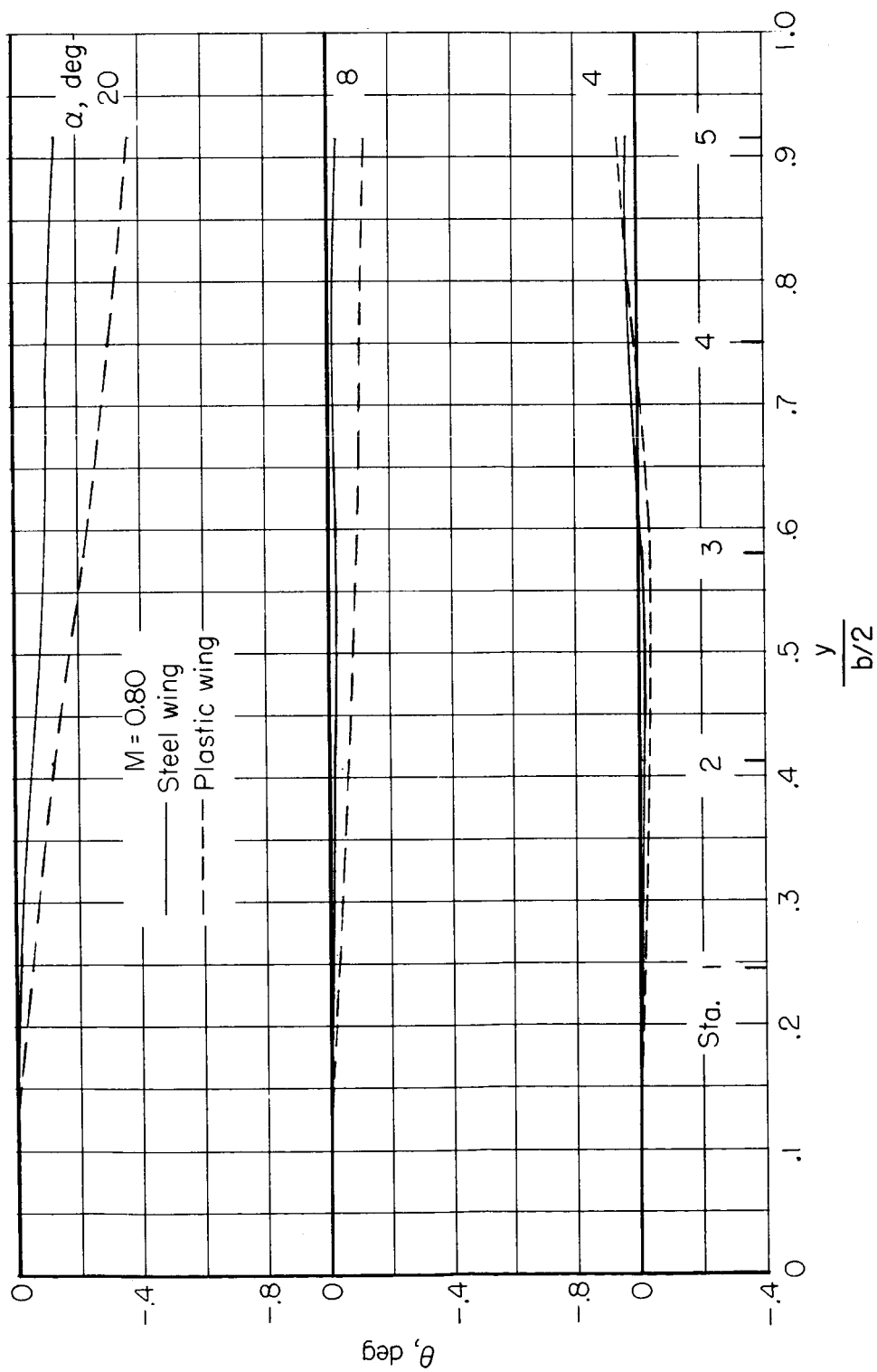
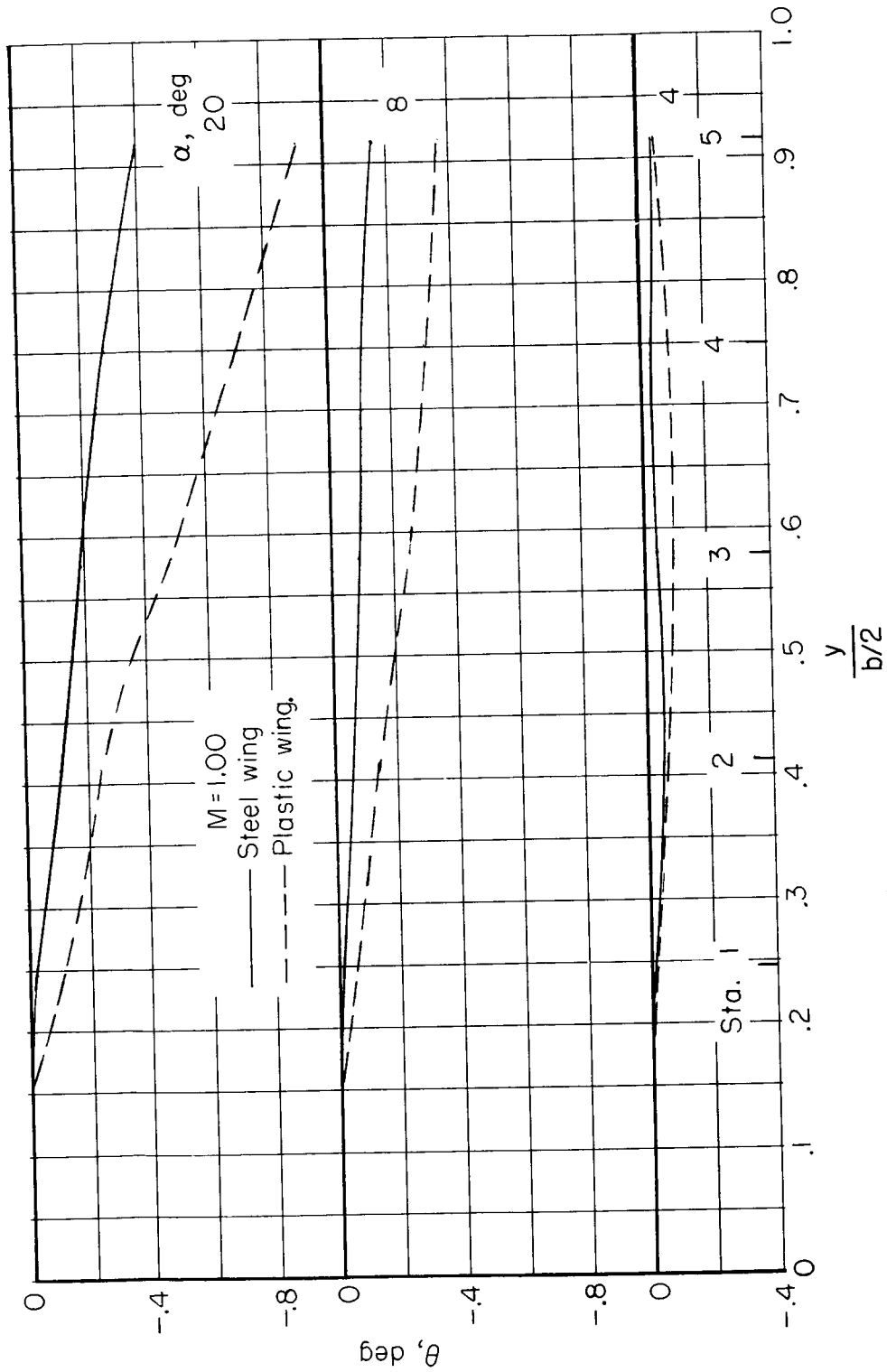


Figure 9.- Range of dynamic pressures for both steel and plastic wings for these tests.



(a) $M = 0.80$.

Figure 10.- Comparison of the calculated twist distribution due to experimental aerodynamic forces and moments, measured parallel to the angle-of-attack plane.



(b) $M = 1.00$.

Figure 10.- Concluded.

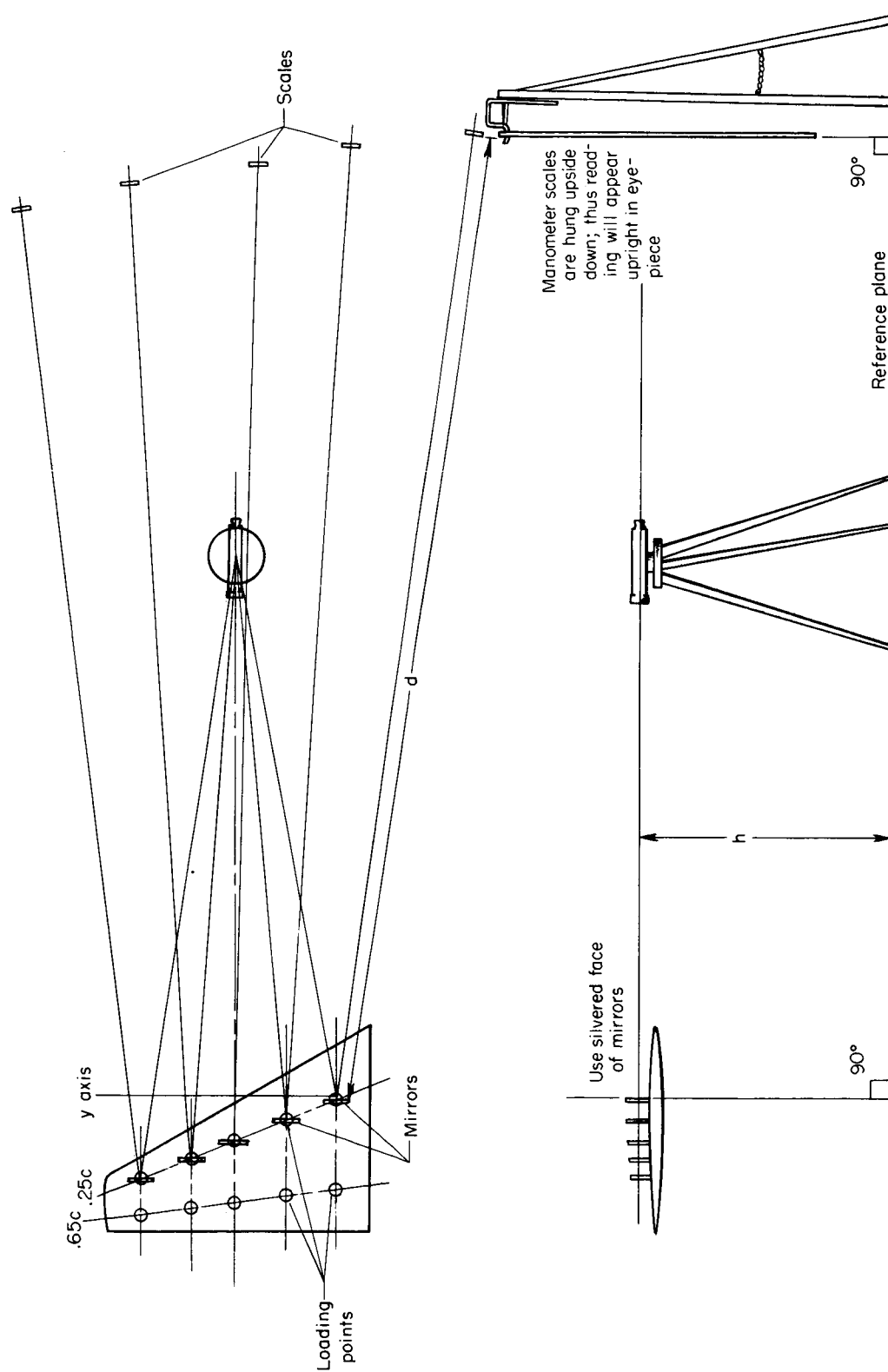


Figure 11.- Typical setup for measuring twist with mirrors.